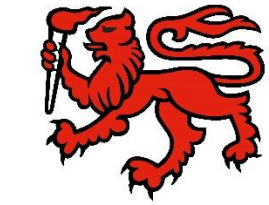

Back to the Agora!

Ancient light on modern failure to address climate change

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David Clarke
25 November 2020

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I especially thank Helen, my partner of 26 years, for her endless good humour, patience and support, and for her close proofreading. Given the efforts of David, Richard, Gus and Helen, this text should be error-free. Of course it isn't, but any remaining mistakes are mine alone.

Our two cats have been my constant study-room companions throughout this journey, though one of them occasionally expresses her opinion of my work by leaving a deposit under my desk. I have my suspicions about the culprit's identity.

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Abstract

In 416 BCE, Athens subjected the people of Melos to an act of genocide. All Melian men were executed and all its women and children were enslaved. None of this was unexpected. Melos's oligarchs had been told what would happen if they defied Athens. The Athenians had been perfectly clear that Melos had no alternative. Nonetheless, the oligarchs chose to resist. It was a decision characterised by folly, poor risk assessment, refusal to accept reality, irrational emotional attachment, and breakdown of dialogue.

Melos's fate has disturbing parallels with our reluctance or inability to address climate change. We know what causes climate change, we have been warned about it for half a century, we know that its consequences will be ruinous, and we know what to do, so why don't we address it?

Our collective failure to act seems to defy explanation; consequently, the problems of climate change appear intractable. Both suppositions are wrong, but they expose deep-seated flaws in how we deal with existential threat**.** By exploring the origins of our intellectual inheritance, and applying research in fields such as neuropsychology and social theory, we *can* throw light on our failure, but no monograph has hitherto combined these strands.

This study employs historical criticism to investigate the ancient origins of folly, decision theory to show our deficiencies in assessing risk, neuropsychology to understand the importance of our emotional brain, and social identity theory to understand the New Testament roots of some modern attitudes to climate change.

The major part of this study examines failure of dialogue. The hermeneutic concept of fusing ancient and modern horizons is discussed and applied to the Melian genocide and, in particular, to the dialogues of Plato – the foundation documents of our dialogic tradition. A broad selection of dialogues is examined to demonstrate the critical importance of Plato's dramatic settings and characterisations. The result is a list of characteristics by which Plato portrays the value, methods, pitfalls and dynamics of dialogue. Some of these points are used to illustrate and augment recent research on climate change communication.

One major, and unexpected, finding was that Plato's dialogues signify a retreat from the agora – the political and commercial heart of society. I conclude it is time to reclaim the agora.

Abbreviations

BCE	before the common era (e.g., Socrates died in 399 BCE)
C	centigrade (e.g., 2C = two degrees centigrade)
CE	common era (e.g., St Augustine died in 430 CE)
CFC	chlorofluorocarbon
GHG(s)	greenhouse gas(es)
CO_2	carbon dioxide
IPCC	Intergovernmental Panel on Climate Change
OCD	The Oxford Classical Dictionary
ppm	parts per million
VAD	voluntary assisted dying

Classical works

Names of ancient works are in italics. For example, *Timaeus* is the name of Plato's dialogue in which Timaeus is the main speaker.

Plato's dialogues are cited in the standard Stephanus system of page numbers and letter sections. These are printed in the margins of most translations. For example, *Protagoras* 323b refers to Stephanus page 323, section b, of that dialogue.

Aristotle's works are cited in the standard Bekker system of pages, columns and line numbers. Again, these are printed in the margins of most translations. For example, *Topics* 105a15-20 refers to Bekker page 105, column a, lines 15 to 20. Occasionally I have also cited book and section numbers in which a Bekker reference appears [e.g., *Rhetoric* 2.3 (1380a5-20)].

Terminology

I use the terms 'climate change' and 'global heating' interchangeably. The latter is now generally preferred to 'global warming'. The GHGs we emit are *heating* the atmosphere: 'warming' is merely a less confronting euphemism.

This is the way the world ends
Not with a bang but a whimper.[1]

Introduction

Climate change first entered my consciousness in the mid-1970s. This was not precocity on my part; I was 20 and more interested in motor racing than science or politics. Most people in Australia and elsewhere who listened to national radio or read broadsheet newspapers would by this time, certainly by 1980, have heard about the greenhouse effect and the threat posed by oil and coal consumption. Over four decades later, writing a thesis about global inaction to mitigate the threat was a deflating experience.

This is a philosophical study, though of limited engagement with current philosophical argument about climate change. Take, for example, John Broome's discussion of intergenerational justice in his 2012 book *Climate Matters*. He asks readers to consider a person (Sarah) alive 150 years from now whose life has been vitiated by global heating: could Sarah claim that our generation has done her an injustice by not addressing climate change?[2] Broome thinks she could not,[3] but he overlooks a more fundamental point. Sarah is comfortably remote from us, so we don't have a lot of emotional investment in the argument, but what about a person (let's call her Iris) alive 40 years from now (in 2060) whose life has also been diminished by climate change, probably not by as much as Sarah's, but demonstrably poorer than it could have been? Could Iris claim that the present (2020) generation, in which she is a child, had done her an injustice? We should have no problem imagining what Iris would be thinking because *we* are her equivalent from the perspective of 1980 – 40 years ago when action on climate change should have been underway. *We* are rightly incensed that government policies four decades ago failed to address climate change,

[1] The last two lines of T. S. Eliot's *The Hollow Men* (1925). The final stanza of this poem has the same rhythm as the nursery rhyme 'Here we go round the mulberry bush'. It is a paradigm of bathos.

[2] John Broome, *Climate Matters: Ethics in a Warming World* (New York: W. W. Norton, 2012) 61.

[3] Broome's argument is based on Derek Parfit's 'non-identity problem' [*Reasons and Persons* (Oxford: Oxford University Press, 1986) 351-379]. This argument is refuted by Peter Lawrence [*Justice for Future Generations* (Cheltenham: Edward Elgar Publishing, 2015) 41-43] and by David Coady and Richard Corry [*The Climate Change Debate: An Epistemic and Ethical Inquiry* (Basingstoke: Palgrave Macmillan, 2013) 89-90].

thereby blighting our lives and making it harder for us to take adequate action.[4] We certainly think governments of 1980 have treated us unjustly by not acting when they knew they should, and could, have acted, even though they were well informed about the consequences of inaction. With this in mind I have devoted a chapter to the history of climate change to illuminate my contention that we should think of ourselves as a 'future' generation – from the standpoint of 1980 – now affected by global heating. We are rightly angry now; Iris's and Sarah's generations will be angrier still.

This monograph does not argue about the existence of climate change. I take for granted that global heating is a scientific fact, that it is an existential threat to the human and natural worlds, and that 'we' – mainly governments, particularly those of high-carbon-emission countries – should address it vigorously and urgently. So why don't we? Why have our efforts so far been piecemeal and mostly ineffective?

There are myriad reasons for our failure; some of them suggest deep-seated human frailties and limitations. This study examines a few: folly, poor assessment of risk, neglect of appeal to the emotional brain, and dysfunctional governance. Of necessity these are cross-disciplinary investigations. I am less interested in philosophical argument about why we should act than in casting light on why we don't. There are sound, rational reasons for addressing climate change, but if rational argument were able to carry the day then we would be well on the way to fixing the problem. Attempts to argue people into action are usually futile unless we realise that governments, groups or individuals are more often motivated by emotion than reason, and may as easily act against their own best interests as for them.

The reason for inaction that interests me most is failure of dialogue. The inability of 2019's UN Climate Change Conference to deliver an agreement was a paradigm of such failure. But why are we so poor at dialogue when, from the works of Plato, it forms one of the pillars of our (western) intellectual tradition? Of course this tradition does not encompass some huge GHG emitters such as China and India, but genuine dialogue has the capacity to transcend cultural boundaries. In any case, among the most obtuse and internationally uncooperative countries with regard to climate change are America and Australia.

[4] Wildfires of historically unmatched intensity in California and Australia, and bleaching of the Great Barrier Reef, are merely better known examples of countless existing effects of global heating.

Unsurprisingly, both are also internally riven by conflict over their environmental responsibilities. Both are suffering from dialogic breakdown. Either our dialogic tradition is deficient or it must be revisited and reviewed if we are to understand what is going wrong.

With this in mind, I am applying philosophy to the issue of climate change but I am also applying climate change – specifically our failure to address it – to philosophy. Philosophy should cause us to think about or rethink climate change, but global heating changes everything,[5] including the ways we approach and think about philosophy. It is appropriate, then, to review the foundation documents of our philosophical inheritance, more so as they are also the foundation of our dialogic tradition. To this end I examine Plato's works not so much for their ideas as for the dramatic frameworks in which he presents and shapes dialogue.

Here is an example of what I mean. Val Plumwood argues that:

> Platonic philosophy is organised around the hierarchical dualism of the sphere of reason over the sphere of nature, creating a fault-line that runs through virtually every topic discussed: love, beauty, knowledge, art, education, ontology.[6]

Plumwood's interpretation of Plato is forceful and compelling. To overcome human/nature dualism she urges us to pursue an 'exhilarating and many-dimensional' life in 'active dialogue with earth others'.[7] In advocating such dialogue, Plumwood asks how far we are entitled to impose ourselves on, or assert ourselves against, an earth other, and whether one party must always adapt to the other, and how much we expect to share. She notes that exchanges between self and other should be multiple and contextual rather than single and stereotypical. Plumwood does not realise, however, that all these points are addressed by Plato. Of course Platonic dialogue is between people, not with earth others, but the dynamics of dialogue – its complexity and contextual character, and requirement for compromise and generosity – are all explored by Plato. Moreover, some of these dynamics have little to do with verbal

[5] Echoing *This Changes Everything* by Naomi Klein.

[6] Val Plumwood, *Feminism and the Mastery of Nature* (London: Routledge, 1993) 81.

[7] Ibid., 139. 'Earth others' are non-human beings in nature whose needs, purposes and goals must be acknowledged and respected.

exchange and much more to do with a dialogue's dramatic location. For example, any adequate construal of the *Republic* – which is largely about the ideal city – must ask why its narrative setting is within a private dwelling in Piraeus, though it is narrated by Socrates, who was notorious for haunting the public spaces of Athens.

Plato's works do not provide a solution to our dialogic failure, but they do throw light on something we have forgotten or neglected: we usually do better when effective dialogue underpins our attempts to grapple with important matters. Plato shows us that dialogue can be mutually beneficial, illuminating and effective, but also frustrating, difficult, ad hoc and occasionally dangerous.

This monograph consists of three parts. The first two chapters establish the hermeneutic and factual bases for this study. Chapter 1 discusses the interpretation of ancient texts – mainly Plato, but also Thucydides – in light of modern concerns, some of which derive from our inheritance of ancient traditions. This chapter draws in particular on Hans-Georg Gadamer's work on the fusing of ancient and modern hermeneutic horizons. Chapter 2 establishes the historical bedrock of this study: climate change is neither a novel crisis nor a recent idea. Our inability to address a long-standing and familiar problem suggests fundamental inadequacies in our social, political and intellectual inheritance.

Chapters 3 to 8 investigate the most salient of these deficiencies. Chapter 3 deals with folly, examining its long history and ubiquity, and chapter 4 discusses assessment of risk. Chapter 5 combines the two by examining a paradigm of folly exacerbated by poor risk assessment – the genocide of ancient Melos. This chapter is an example of the hermeneutic methods discussed in chapter 1. Chapter 6 examines the difference between our rational and emotional brains, and finds that failure to appeal to the latter may be a significant component in our failure to address climate change. This chapter also studies the likelihood that global heating fails to trigger appropriate avoidance responses. Chapter 7 looks at the role of millenarian theology within the evangelical church in America in attempting to understand why evangelicals tend to deny climate change and vote for Donald Trump. Chapter 8 investigates political decision-making, discourse and governance. J. L. Austin's ideas about speech acts are examined to explain why certain people or groups can speak but still have no voice. This chapter concludes with a study from Aristotle's *Rhetoric* to throw light on the counter-intuitive persuasiveness of some politicians.

Chapters 9 to 12 discuss the core of this monograph: the failure of dialogue. These chapters establish the characteristics of dialogue and suggest a forum in which dialogue can be conducted. Chapter 9 examines the ideas of Stuart Hampshire in attempting to enunciate minimal conditions for dialogue. This chapter also looks at the possibilities and problems of a digital dialogic forum. Chapter 10 comprises an in-depth study of the dramatic settings and characters from a broad selection of Plato's dialogues. The aim is to identify dialogic characteristics which can inform, prepare, warn and encourage those who participate in dialogue about matters of existential import. Chapter 11 articulates these characteristics, a product of taking seriously the idea that ancient and modern hermeneutic horizons can inform and illuminate each other. Chapter 12 addresses a practical problem: in what sort of forum can genuine dialogue occur?

In summary, this thesis is about climate change *and* Plato. It attempts to clarify our failure to address the former, and attempts to read the latter afresh in light of that failure.

What matters most: avoiding bathos

The final paragraph in volume 1 of Derek Parfit's last major work is the following:

> What now matters most is that we rich people give up some of our luxuries, ceasing to overheat the Earth's atmosphere, and taking care of this planet in other ways, so that it continues to support intelligent life. If we are the only rational animals in the universe, it matters even more whether we shall have descendants during the billions of years in which that would be possible.[8]

Volumes 2 and 3 conclude with similar statements. At first reading these conclusions are a bit lame, particularly when each is preceded by a volume of outstanding argument about, and analysis of, morality by one of the sharpest philosophers of the last half century. It is as if Parfit ran out of steam and, philosophically enervated, threw off a few trite conclusions. I was keen for each volume to close with something more inspiring, perhaps moral philosophy's equivalent of 'Workers of all countries, Unite!'. However, Parfit has the tone exactly right – a skilful use of bathos to prompt thought about our future. The human story begins with bathos: in attempting to become wise, Adam and Eve's eyes are opened not to

[8] Derek Parfit, *On What Matters*, vol. 1 (Oxford: Oxford University Press, 2011) 419.

cosmological secrets but merely to their need for clothes. Like T. S. Eliot, Parfit is warning us not to allow the human story to expire in bathos.[9] To that end, his volumes are philosophical parables: the worthiness of what precedes does not preclude a subdued end. After the magnitude of human achievement – in cosmology, technology, literature, architecture and art to mention an obvious few – it would be bathetic if we failed to attain the comparatively modest goal of not undermining the conditions that allowed those achievements to flourish.

[9] Eliot was also aware of a common theme in nearly all Jewish and early Christian eschatological literature: the end will resemble the beginning. ['Eschatology' is discourse about the end-time.]

Hermeneutics rests upon dialogical foundations: to interpret a text means to enter into a conversation with it, direct questions to it, and allow oneself to be questioned by it.[1]

Chapter 1
Ancient and Modern Hermeneutic Horizons

Introduction

In December 2019, the United Nations Climate Change Conference in Madrid produced frustration and exhaustion, but no agreement. Representatives from the assembled countries were more than adequately briefed about the consequences of not reducing GHG emissions, but still failed to achieve an international pact to address global heating. As one delegate said, 'It was more than disappointing. People were in tears in the halls. I think a lot of people just felt sick.'[2] Why did dialogue fail so miserably, particularly when nearly all participants were in general agreement about the problem and the solution? Perhaps the impediment is endemic within modern society: an inability to discuss, let alone address, a global threat which is largely a by-product of the economic systems on which we all depend. It is more likely, however, that we possess the wherewithal to tackle climate change but that our modern horizons – the products of our cultural, social and historical inheritance – have become narrow and stale. We need to broaden and refresh our inheritance, and the best way to do so is to review and re-energise that part of our horizon in which dialogue is paramount – the part founded on and informed by the works of Plato.

Hermeneutics

Hermeneutics began with the interpretation of canonical texts such as Homer and the Old and New Testaments.[3] It is now applied to fields such as sociology, psychology and jurisprudence. The last-mentioned is a familiar example of hermeneutics in practice. If we consider the US Supreme Court, for example, the justices endeavour to interpret a text – the Constitution – with reference to a matter before them. This is far from straightforward if, as

[1] Jean Grondin, *Introduction to Philosophical Hermeneutics*, Joel Weinsheimer trans. (New Haven: Yale University Press, 1994) 74.

[2] Karen Middleton, 'Carryover regardless', *The Saturday Paper* (21 December 2019 - 24 January 2020).

[3] For a succinct introduction to modern hermeneutics see Joel Weinsheimer, *Philosophical Hermeneutics and Literary Theory* (New Haven: Yale University Press, 1991) 1-23.

is often the case, that matter is not mentioned in the Constitution because it could not have been envisaged in the late 1700s. The hermeneutic task, then, is to bridge the gap between the present and a text written over two centuries ago. The court's job is to understand what the Constitution meant in its own day *and* what it means to modern citizens. Clearly this is more than an antiquarian exercise of investigating the past for its own sake. Rather, it acknowledges that past and present are in dialogue with each other and that this dialogue informs and changes both. The court's ruling not only establishes what is lawful in the present but also changes how the Constitution is read.

This example highlights a fundamental point about creative tension between past and present. This tension is produced by recognising what the text does not or could not say *and* by accepting the text as authoritative in, or relevant to, a situation that is alien to its original context. When we read Plato's dialogues, then, we are not looking for tips on how to address a problem about which Plato knew nothing. Rather, we accept his works as authoritative – in the sense that they are among the foundation documents of our intellectual tradition – and as relevant in that we share important subject matter with them – in particular, anxiety about the condition of political dialogue and the poverty of language.

Plato's dialogues were written in, and were a response to, a period of political disintegration and moral dissolution. In and of itself this is not especially significant: probably most people, in most periods of history, have thought much the same about the era in which they live. What is significant, however, is that Plato's response consisted of dialogues, not treatises: he is making us part of the conversation, not telling us what to think. Further, his dialogues focused largely on one person – Socrates – who participated minimally in politics and was himself a victim of political and personal malice. Socrates was not a political lodestar; he was an irritant whose unwelcome questions exposed the ignorance of those who took for granted their right to exercise power.

Horizons of interpretation

We accept as a truism that a work of literature may render different meanings in the various situations and periods in which it might be read. For example, Albert Camus' *La Peste* (*The Plague*) may be read as an allegory of German occupation of France in the Second World War, but when Covid-19 is stalking the world most people will read it as the story of a modern city struck by plague. When Camus says that, before the plague ended, the residents

of Oran could hear trains whistling and ships hooting in their imagination as the city's quarantine was lifted, we share their anticipation of release from 'lockdown'.[4]

With qualifications, this truism extends to great works of philosophy. For example, few of us would now read Aristotle as Thomas Aquinas read him, let alone as Aristotelians of the 1400s and 1500s read him to promote witch-hunting.[5] On the other hand, we often engage with great works as if they were written to address today's issues – surely a criterion for regarding them as great. For instance, a course in political philosophy would be threadbare if it did not include discussion of Plato's *Republic* and Aristotle's *Politics*. As J. L. Ackrill asserted about Aristotle – the same is true of Plato – we don't merely want to gain some understanding of him: we want to understand the specific philosophical problems he confronted. To that end, 'we are entitled to engage him in argument as if he were a contemporary'.[6] Ackrill's instinct is sound; while our 'entitlement' does not circumvent the basic hermeneutic problem of interpreting an ancient text, we do think we are engaging in much more than a historical exercise. We feel there is a discussion going on between us and Aristotle, and as with any discussion we unavoidably bring our own viewpoints to it. Hans-Georg Gadamer described this as the fusing of horizons – ours with that of the text we are interpreting.[7] The metaphor is appropriate. Our hermeneutic horizon is the range of what we can 'see', in terms of meaning and understanding, from our vantage point. Like a visual horizon, it is not closed or fixed; it is the epistemic area in which we move and which moves with us.

The study in chapter 5 of Athenian destruction of Melos is an example of fused horizons. Thucydides' account is able to inform our failure to address climate change, and our modern horizon throws light on what went wrong with Melos – poor risk assessment mixed with folly – and what happened – genocide, a term that did not exist before 1944.

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[4] Albert Camus, *The Plague*, Stuart Gilbert trans. (Harmondsworth: Penguin, 1960) 222.

[5] As Jeffrey Russell noted in *Mephistopheles* (Ithaca, NY: Cornel University Press, 1986) 30. For a brief account about the importance of Aristotelianism to the witch craze, see Brian P. Levack, *The Witch-Hunt in Early Modern Europe*, 2nd ed. (London: Longman, 1995) 60-64.

[6] J. L. Ackrill, *Aristotle the Philosopher* (Oxford: Clarendon Press, 1981) 2.

[7] Hans-Georg Gadamer, *Truth and Method*, 2nd English ed., W. Glen-Doepel trans.; rev. Joel Weinsheimer and Donald G. Marshall (London: Sheed & Ward, 1989) 302-307.

Horizons are both individual and societal. Each of us is born into a certain cultural horizon, but that horizon does not determine an individual's or group's outlook. When we speak of a person's narrow horizon we concomitantly imply that other people (we usually mean ourselves) are not so limited. Importantly, the individual with a narrow horizon tends to over-value what is nearest to him or her, whereas somebody with a broader horizon is better able to grasp the relative value of things, whether near (in time and/or space) or far.[8] Whether horizons are narrow or broad, we cannot escape them. We might think we could work out *the* interpretation of a text by abstracting ourselves from the limits of our horizon, but this is neither possible nor desirable: without a horizon we have nowhere from which, and nothing with which, we can approach the text.

Horizons are also gendered. As Michèle Le Doeuff noted with regard to a definitive interpretation:

> If a man and a woman read the same text in a radically different way, where will we find the angel who, having read *the* text, can understand the difference, and to whom will that angel explain it?[9]

This should not be a cause for despair. As Le Doeuff rightly argues, even though it is very likely there are differences between the ways a woman and a man read the same text, there is no need to regard these differences as radical and definitive, 'which would render all debate either impossible or pointless'.[10] Instead, we can use our historical and cultural understanding to analyse how and why readings are different, and thereby challenge our own interpretation and the horizon that produced it. To return briefly to Aristotle, his assertion that 'we must look upon the female character as being a sort of natural deficiency'[11] is important for understanding why European witch-hunts killed so many woman, but that understanding must also be informed by asking why this Aristotelian stereotype of women existed for

[8] This point is of particular import for addressing climate change. If we over-value what is nearer to us we will tend to under-value, or even ignore, what is distant, such as the more confronting effects of global heating.

[9] Michèle Le Doeuff, *Hipparchia's Choice*, Trista Selous trans. (Oxford: Blackwell, 1991) 65.

[10] Ibid, 65-66.

[11] *Generation of Animals* 775a14.

centuries without becoming deadly. In short, the horizons of both an ancient text and its interpreters are always in motion, and each illuminates the other. The ancient text I interpret will already have formed part of the horizon I bring to that text, and my interpretation will in turn change its and my horizons.

Clearly the fusing of horizons does not mean either sloughing off our modern identities before entering an ancient and alien world unconnected with our own, or imposing on an ancient horizon to the degree that it reflects only our image and manifests only our interests. Instead, the task is to see the past on its own terms, transposing ourselves into its horizon, letting it speak to us so we might understand what it is attempting to say. In this way we should discern that an ancient text is not trying to answer our questions, though it may illuminate the way we think about them. Rather, if we are to understand an ancient text then we must try to work out the question to which that text was intended as an answer,[12] or the matter on which the text was a comment.

When approaching ancient texts with the prejudices and preconceptions that constitute our horizons, we cannot entirely avoid reading some of our concerns into those texts, and we do so either intentionally or inadvertently. Examples of the latter include histories in which the voices and roles of women are neglected,[13] while examples of the former include works in which dollops of Marxist theory are applied. For instance, Geoffrey de Ste Croix's *Class Struggle in the Ancient World* is a paradigm of applying Marx's ideas of class and class

[12] A point asserted by R. G. Collingwood in his *Autobiography* (Oxford: Oxford University Press, 1978) 31-33. Collingwood was both archaeologist and philosopher, and he applied this interpretative method to his fieldwork. He was, for example, the first archaeologist to ask seriously about the purpose of Hadrian's Wall in northern England – that is, to what problem was it the solution? Collingwood rightly insisted that stating its purpose as 'frontier defence' was no more informative than asserting of a marine engine that its purpose is to drive a ship. Collingwood noted that several features of the wall made it less useful for defence. He postulated that its main purpose was as an elevated sentry-walk, a view that was and is generally accepted [ibid. 128-129].

[13] For example, Abraham Malherbe's *Social Aspects of Early Christianity* might be expected to devote considerable attention to women in the early church – the importance of women is very evident in the New Testament – but he mentions only one – Phoebe, a deacon in the Roman church (*Romans* 16.1). Moreover, Malherbe does not notice the importance of Paul's acknowledgement of his social dependence on Phoebe [*Social Aspects of Early Christianity*, 2nd ed. (Philadelphia: Fortress Press, 1983) 98].

struggle to understand what happened in the ancient world. The general thesis of this work has been partially, though not entirely, refuted,[14] but no-one could deny that de Ste Croix brought to our attention the vast number of people whose lives and practices had hitherto existed as little more than historical backdrop, even though Greek and Roman societies could not have existed without them. With regard to our pursuit, the importance of de Ste Croix (and others like him) lies not only in how he approached the ancient world but also in what that approach meant for our world. As he forcefully asserted:

> Let us be clear about one thing. Whereas descriptions of ancient society in terms of some category other than class – status, for instance – are perfectly innocuous, in the sense that they need have no direct relevance to the modern world (which will of course need to be described in terms of a completely different set of statuses), an analysis of Greek and Roman society in terms of class, in the specifically Marxist sense, is indeed … something *threatening*, something that speaks directly to every one of us today and insistently demands to be applied to the contemporary world.[15]

De Ste Croix is both over- and understating the case. He is right about the capacity of ancient texts (and other evidence, but we are concentrating on texts) to speak forcefully to the modern world, but wrong in thinking they do so only when we approach them with theories that are relevant to us, particularly if they pose a welcome (for some) threat to our social equilibrium. De Ste Croix's view is that if Marx's analysis, largely developed from his investigations into 19th century capitalist society,[16] were also able to explain events and transformations in ancient societies, then its claim to relevance for our world cannot be ignored. The obvious problem with this view is that if Marx's class analysis were found wanting with regard to the ancient past then it would not be relevant to us either. It's worth responding to de Ste Croix using his own example of ancient status as irrelevant to the

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[14] Michael Grant rightly noted that 'the greater part of the history of Greece and Rome witnessed no overt class struggle at all' [*Greeks and Romans: A Social History* (London: Weidenfeld and Nicolson, 1992) 136].

[15] G. E. M. de Ste Croix, *The Class Struggle in the Ancient Greek World* (London: Duckworth, 1981) 45 [italics in original].

[16] As Marx asserted, analysis of bourgeois society 'also allows insights' into the structures and relations of production of the vanished societies from which it was built. 'The bourgeois economy thus supplies the key to the ancient' [*Grundrisse*, Martin Nicolaus trans. (Harmondsworth: Penguin, 1973) 105].

modern world. It is surely not 'innocuous' and irrelevant to the modern world to discover that ancient pagan texts condemned Christians for providing aid without regard to the social merit of the recipient.[17] Australia and America are not alone among ostensibly Christian countries[18] whose view of welfare recipients is much closer to the pagan attitude – most recipients are undeserving – than the less judgemental and non-discriminatory Christian ideal. Even though de Ste Croix was right in asserting that ancient and modern notions of status are very different, for a country like the United States, where about two-thirds of citizens identify as Christian, it is not difficult to see how an ancient horizon could be threatening in its insistent demand to be applied to our world.[19]

Plato's dialogues

Except for some letters (of which only one is possibly genuine) all of Plato's works are dialogues of one form or another. The earliest written works of western philosophy to have survived, they comprise the foundation documents of our intellectual tradition. This is important: it is dialogue – argument with other people about matters dear to them – that primordially underpins our tradition, rather than treatises about those matters.[20] Contrary to a

[17] E. A. Judge, *Social Distinctives of the Christians in the First Century* (Peabody, MA: Hendrickson, 2008) 154.

[18] 'Ostensibly Christian' in that state and federal legislatures in both countries acknowledge their Christian heritage by, for example, reading prayers at the beginning of sitting days. In Australia, the federal government and most state governments mark the opening of each new parliament with a church service. The official motto of the United States is 'In God We Trust'. It appears on US currency.

[19] Even though Christianity is declining in the United States, 65% of Americans still identify as Christian, while the percentage who have no religion has increased to 26% ['In U.S., Decline of Christianity Continues at Rapid Pace', Pew Research Centre (17 October 2019)]. By comparison, in Britain 38% identify as Christian, while 52% have no religion [J. Curtice et al. eds, *British Social Attitudes: The 36th Report* (London: The National Centre for Social Research, 2019) 1-2]. A more telling point, however, is the extreme unlikelihood of an atheist becoming US president. Even President Trump parades his (highly unlikely) adherence to Christianity. Notoriously, on 1 June 2020 he displayed a bible in front of St John's episcopal church near the White House. However, in doing so he demonstrated he knew nothing about his own evangelical support base: he held up a Revised Standard Version (RSV) instead of a version acceptable to evangelicals, such as the Authorised Version or the New International Version. The RSV is rejected by most evangelicals as a 'liberal' bible.

[20] As it happens, nobody after Plato came close to producing dialogues of such philosophical profundity and literary quality. The only other philosopher to have written dialogues of nearly comparable quality is

popular misquotation of A. N. Whitehead, Plato did not set the agenda for all subsequent western philosophy,[21] but there can be little doubt that if we want to cast some light on our current inability to communicate adequately and resolve matters effectively then we must revisit Plato's dialogues. Why, though, is this important given that climate change is a global problem, not a specifically western phenomenon? After all, there are plenty of countries and cultures that possess little or no western heritage. The answer is twofold. First, western countries inescapably bring their cultural heritage to international dialogue, and they will be better at it if they understand how their own dialogic tradition works or fails to work. Second, Plato's dialogues are more than discussions about a set of ideas. Importantly, and inextricably, they show us what dialogue is like, what its pitfalls are, what happens when people disagree and so on. In this regard they are pan-cultural, the heritage of anybody who questions and converses with other people about why they hold certain views.

Moreover, as Gadamer asserted, dialogue is 'not the art of being able to win every argument'.[22] He is right; dialogue is not a contest, but his assertion should be extended beyond live interlocutors to horizons. The openness required between parties to a dialogue, the willingness to question and be questioned, should similarly be exercised by us towards an ancient text. In short, we are having a conversation with Plato, not trying to defeat him in argument or impose our horizon on his. We are approaching the text on its own merits and listening to what it has to say, even if, at first glance, we might have trouble discerning its relevance.

Listening to Plato entails taking seriously the dramatic settings, characters and other devices he employs to facilitate the progression of his dialogues. In particular, he wrote

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David Hume, but his *Dialogues Concerning Natural Religion* seem forced and artificial compared with Plato's best works. Aristotle also wrote dialogues, but regrettably none has survived.

[21] The full quote in context is: 'The safest general characterization of the European philosophical tradition is that it consists of a series of footnotes to Plato. I do not mean the systematic scheme of thought which scholars have doubtfully extracted from his writings. I allude to the wealth of general ideas scattered through them. His personal endowments, his wide opportunities for experience at a great period of civilization, his inheritance of an intellectual tradition not yet stiffened by excessive systematization, have made his writings an inexhaustible mine of suggestion' [*Process and Reality* (New York: The Free Press, 1978) II.I.I #39]. Whitehead clearly enunciated why we still read, or need to read, Plato.

[22] Gadamer, 367.

under the shadow of Socrates' condemnation and death. This alone is a salutary reminder that dialogue always take place within a context – often not of our choosing, perhaps under a menace we cannot escape but for which we were not responsible, and with people of ill-will, goodwill or no will at all.

Understanding as application

Conversation is more than just hearing what the other person says. If I am speaking to someone but am curtly or silently dismissive of what she is saying, then I am not listening in the sense of attempting to understand her point of view and why she holds it. Rather, the conversation has become a routine in which she vents her views but they have no purchase in my life. On the other hand, if I were listening I would *apply* her views to my life. This does not mean uncritical acceptance of her message; it means taking seriously what she says, and considering and responding to her message within the context of my life. Of course I might reject what she said, but my rejection will be informed by, and responsive to, the matters she raised. In short, I actively apply her message to my life. Such application may take a variety of forms – disagreement, revising my views, taking some action, and so on – but they all entail that I have to some degree understood what she said.

Our conversation with ancient texts is similar, except that the respective horizons are different. I share the same, or a largely overlapping, horizon with a live interlocutor, whereas my conversation with an ancient text might involve an attempt to fuse very disparate horizons. Listening to the text means taking seriously its claim to have something to say, treating it as more than a philological exercise, and applying it to our own situation. As Gadamer put it, 'understanding always involves something like applying the text to be understood to the interpreter's present situation. … Understanding here is always application.'[23]

Further, applying the text to my situation entails changing my horizon, which in turn changes the meaning of the text, which again modifies my horizon, and so on – a dialogue that never ceases because there is no bedrock interpretation of the text that can finally close the conversation. In short, Plato's dialogues underpin our dialogic tradition, and reading them both informs and transforms that tradition.

[23] Gadamer, 308-309.

The modern horizon

Our view of the world is framed in part by our concerns about climate change and our collective inability to discuss it adequately, let alone do much about it. We cannot abstract ourselves from those concerns when we read an ancient text. Indeed, the fusion of ancient and modern horizons will inescapably reflect the shadows under which each is formed. The death of Socrates is for Plato what global heating is for us insofar as each frames and shapes their respective discourses. For example, Plato's dialogue about epistemology (*Theaetetus*) is framed by Socrates' indictment and death [142c, 210d], while climate change is the spectre that haunts so much of our moral, epistemological, economic, social and political discourse.[24] This does not mean that all discourse in these areas refers to climate change, nor do all of Plato's dialogues refer to Socrates' death, but even their respective absences are hermeneutically significant. For example, while Socrates does not appear in the *Laws*, his absence prompts questions about Plato's intent, the role of this dialogue within his corpus (particularly its relation to the *Republic*), whether the ideas presented imply he has abandoned Socrates' legacy, and so on. Similarly, the Australian Government's *Open Government National Action Plan* fails to mention anything about climate change, an absence that might be unremarkable except that the Government's stated goals for transparent and accountable government include sustainable development, human rights protection, and addressing inequality and injustice,[25] none of which is now possible without also confronting global heating. In short, these frames have a similar hermeneutic role: we cannot avoid them and, while they do not determine the meaning of any discourse, they have to be investigated and acknowledged if our interpretation of an ancient or modern text is to be a serious attempt to understand that text within its context and on its terms, and if we are to apply that text to our lives.

Ancient and modern dialogic frames

Coming to grips with the Plato's dialogic frame does not necessarily include a better understanding of Athenian injustice and Socrates' fate. Rather, it means attending to the

[24] There should be no surprise about including epistemology. Familiar questions such as, 'In what sense do we know something if that knowledge does not motivate us to act?', have received a relevance boost from climate change.

[25] *Australia's Second Open Government National Action Plan 2018-20* (Department of the Prime Minister and Cabinet, 2018) 6.

dialogues' dramatic settings and characterisations in order to understand better the ways in which Plato fashioned his dialogues. By investigating the beginning of our intellectual tradition and attempting to fuse ancient and modern horizons we might throw some light on the following questions:

(1) Why do some dialogues fail while others are more successful?
(2) What are the pitfalls or advantages in dialogue, as opposed to monologue or treatise?
(3) What about personality clashes and *ad hominin* arguments?
(4) What does 'location' mean, and is it important, in conducting a dialogue?
(5) What are the implications of dialogic failure?

The justification for undertaking this exercise is straightforward. We exist in a given historical trajectory, so 'we are always already affected by history'.[26] Consequently, when we investigate a matter, the worth of our investigation is to some degree determined by that trajectory, as are the things to be investigated. The importance of an inquiry into the failure of contemporary political discourse reflects the importance of our dialogic heritage, and the things investigated – Plato's dialogues – comprise the ground and essence of that heritage.

The key to interpreting Plato?

None of the above is proffered as the 'key' to reading Plato: there is no such key. As Debra Nails rightly asserted, no dramatic or historical details provide 'a key for unlocking the meaning of any dialogue. Some of the worst readings of Plato have been grounded on that indefensible assumption.' Plato's philosophy *is* 'grounded in the specifics of his social and cultural environment', but *not* 'in the sense that it is an inevitable outcome of that environment'.[27] Further, looking for a hermeneutic key in an overarching argument or doctrine abstracted from a dialogue – such as the theory of recollection, first mooted in the *Meno* – is also mistaken. Of course these theories can be examined apart from their contexts – most philosophy courses study Plato in this way – but this fails to take seriously the ways in which Plato conducts philosophy as an irreducible interplay between specific details and general ideas. Nobody else in western philosophy was so careful to conduct argument and

[26] Gadamer, 300.

[27] Debra Nails, *The People of Plato: a Prosopography of Plato and other Socratics* (Indianapolis: Hackett, 2002) xxxviii.

present ideas within definite situations populated by identifiable people. Ergo, it is important, and sometimes vital, to know the dramatic details and characters. The identity of an interlocutor might be critical in differentiating between a feasible and an improbable interpretation of a dialogue.

It hardly needs stating that this is *not* a new way of reading Plato. Indeed, every generation reads Plato anew, and can hardly do otherwise. We cannot abstract either Plato or ourselves from our respective locations. The age in which we live, framed by the politics of climate change, is different from our forebears' age. Climate change does not suggest, let alone determine, a way of reading Plato, but it is unavoidably part of the horizon we bring to our reading of his dialogues. We are not looking to Plato for answers to our fears, disappointments and frustrations, but they will inevitably affect our reading of his texts.

Conclusion

Plato's works entail that a, perhaps the, cornerstone of western intellectual thought is dialogue. We must revisit these primordial dialogues if we are to refresh our understanding of what dialogue is and how it works, and why it underpins our intellectual tradition, and thereby inform ways in which we conduct contemporary dialogue.

The fusing of ancient and modern hermeneutic horizons is possible because they have subject matter in common. Platonism is an intrinsic part of our intellectual inheritance, so it is inevitable for each horizon to inform the other to at least that degree. Further, both horizons demand we confront a fundamental question that underlies Plato's dialogues and our predicament: can a society survive corruption of its language? As Richard Palmer says, language 'is the repository of our whole culture's way of seeing'.[28] If our language is slipshod

[28] Richard E. Palmer, *Hermeneutics* (Evanston: Northwestern University Press, 1969) 253. Lest this be regarded as a peculiarly western problem, it is noteworthy that Confucius (550-480 BCE) raised a similar complaint. When asked what his first initiative would be if he were put in charge of the country, Confucius replied that he would rectify the language so that the names of things matched their realities. His reasoning was that if words do not match their reality then language lacks clear objects towards or against which the actions of citizens can be directed. Sound government becomes impossible because the properly directed social energy necessary to drive it is dissipated. As Simon Leys notes, the whole Confucian enterprise could be summarised by stating that the socio-political order is built on correct use of

then our capacity to grasp concepts and understand problems is compromised.[29] The mission of Socrates is instructive: we assume we know the meaning of words and concepts, and that other people share that meaning, but a little questioning might reveal we are talking at cross-purposes or don't know what we are talking about.

For example, 'climate change' denotes atmospheric heating caused by GHGs, but its connotation includes 'recent global threat', 'most important moral issue of the twenty-first century', 'risk to future generations' and so on. However, what if climate change were a phenomenon that should have been addressed decades ago, and what if the general concept of anthropogenic climate change were part of our inheritance from ancient and early-modern times? We regard ourselves as responsible for the fate of future generations, but this perception looks different if we also see ourselves as victims of an earlier generation's inaction and therefore determined not to let the same thing happen to those who come after us. The horizon of the recent past is coloured by our resentment against its leaders, but in turn this horizon poses the following question to us: isn't our resentment empty if we do nothing to prevent the next generation from resenting us? The next chapter puts climate change in an unfamiliar hermeneutic context – as a phenomenon we have inherited and as an idea that is part of our intellectual and cultural tradition.

language [*The Analects of Confucius*, Simon Leys trans. (New York: W. W. Norton, 1997) #13.3, and p. 181].

[29] I note, for example, George Orwell's lament that 'the English language is in a bad way' and that 'the decline of a language must ultimately have political and economic causes'. The effect – impoverished language – can itself become a cause, reinforcing the original cause and in turn exacerbating the effect. In this way, language becomes 'ugly and inaccurate because our thoughts are foolish, but the slovenliness of our language makes it easier for us to have foolish thoughts' ['Politics and the English Language' in *The Penguin Essays of George Orwell* (London: Penguin, 1984) 354].

We need … a history, not of progress, but of delay; not of events, but of non-events; not of an inflexible logic, but of a sloppy logic; not of overdetermination, but of underdetermination.[1]

Chapter 2
Climate Change: nothing new under the sun

Overview

The idea that climate can be affected by human activity has been part of western tradition for over two millennia. The science of climate change has been extant for more than a century, and the need to address it has been pressing since the 1960s. This chapter puts our meagre efforts to address climate change in those contexts. We are rightly concerned about our failure to do anything substantial since, say, 2000, but this failure was preceded by two or three decades of inaction. We are now the 'future generation' that should have been spared the deteriorating climate we have inherited. Our task should be to ensure that the next generation does not feel as we now do.

We *are* capable of effective action

In 1980, few might have predicted that so little would have been done to address climate change over the ensuing 40 years. After all, related problems – air pollution caused by industrialisation and its products, thinning of the stratospheric ozone layer, and acid rain – had been addressed to some degree in most advanced economies, so there were relevant precedents for effective action.

For example, the Clean Air Act of 1970 was largely responsible for reducing aggregate emissions of six common pollutants in the United States by 73 percent since 1970. Air quality improvement in London was also dramatic. The capital's air had been poor since coal-burning proliferated in the 1200s, but it turned deadly in the 1800s. A severe smog in December 1873 killed 500 people; over 2,000 succumbed in February 1880. The infamous smog of December 1952 killed over 4,000; public outrage forced the government to act. Following the Clean Air Act of 1956, London's atmosphere improved markedly, mainly by

[1] David Wootton, *Bad Medicine* (Oxford: Oxford University Press, 2007) 21.

replacing coal with smokeless fuels. By 1970, smoke over London had decreased by 80 percent, while December sunshine had increased by 70 percent.[2]

Embrace of pollution control by major industrial countries was one of the most 'important popular political mobilizations of the twentieth century'.[3] The reasons for it are instructive. First, the social and economic costs of pollution began to outweigh industries' social licence to pollute. Citizens and governments accepted certain levels of pollution as the cost of doing business, but much that had been acceptable in 1950 was unacceptable by 1980. Second, the percentage that polluting industries contributed to GDP was declining, so they lacked some of the political influence they once enjoyed. Third, pollution control became profitable in its own right. *All* of these reasons also apply to the generation of GHGs, but they have so far failed to curb our emissions. One reason for this failure is straightforward: CO_2 might be a pollutant in the denotative sense, but not in any regular connotative sense. In normal linguistic usage, an 'air pollutant' – such as fine particulates, CFCs and sulphur emissions – both denotes and connotes a contaminate that should be eliminated from the atmosphere, whereas CO_2 is essential for life, its atmospheric levels fluctuate throughout the year, a 'bit more' won't harm us, and so on. In short, it largely fails to connote a sense of contamination.

Closing the ozone hole

Unlike long overdue responses to air pollution, international response to diminishing stratospheric ozone was swift and emphatic. The possibility that CFCs could deplete the planet's protective ozone was mooted in 1974, and confirmed in 1985. The Montreal Protocol was agreed in 1987, with three subsequent amendments to tighten it. CFC production fell sharply and had been almost eliminated by about 2010. Though the ozone 'hole' has been gradually shrinking since the early 1990s, the legacy of CFCs will be with us for the remainder of this century because their chemical stability enables them to remain in the stratosphere for about 100 years. Moreover, the decline of atmospheric CFC-11 has

[2] Clive Ponting, *A Green History of the World* (London: Penguin, 1992) 358-359; J. R. McNeill, *Something New Under the Sun* (London: Penguin/Allen Lane, 2000) 66-67.

[3] McNeill, 107.

slowed, almost certainly because it is being illegally produced somewhere in East Asia.[4] Nonetheless, action to preserve stratospheric ozone was 'an extraordinary international response to an extraordinary problem'.[5]

Transboundary pollution: acid rain

The third example, acid rain, is a paradigm of transboundary air pollution. Sulphur dioxide and nitrogen oxides, produced by burning coal and sulphide ores, may be blown hundreds of kilometres after being emitted from tall smokestacks. Once in the atmosphere, these gasses are transformed into sulphuric and nitric acids which combine with water vapour to fall as acid rain. Downwind of the Great Lakes and Ohio Valley industrial belts, for example, rainfall acidity occasionally exceeded that of fizzy drink.[6] By 1970, over half of lakes in the Adirondacks in upstate New York were too acidic to support fish life.

The problem of acidic precipitation was first identified by Scottish chemist R. A. Smith in 1852. Smith coined the term 'acid rain' in 1859, and explained the phenomenon in detail in his 1872 monograph, *Air and Rain*.[7] However, it was not until the 1970s (in North America) and 1980s (in Europe) that acid-producing emissions were tentatively addressed – 120-plus years after being identified. Nonetheless, Europe's sulphur dioxide emissions have fallen by more than 70 percent since 1990.[8]

There were several reasons for this long period of inaction. If one location is producing pollution, but other places are suffering its effects, the former feels less urgency than the latter to fix the problem, even where all parties are within a single country. These difficulties are exacerbated when emitters and sufferers inhabit different countries. Within and across borders, disparate centres of political power held different views about industrial production

[4] Josh Gabbatiss, 'Ozone hole-forming chemical emissions increasing and mysterious source in East Asia may be responsible', *The Independent* (16 May 2018).

[5] McNeill, 114.

[6] In West Virginia, rainfall could exceed the pH of vinegar [Ibid., 101].

[7] S. J. Woodin, 'Environmental Effects of Air Pollution in Britain', *Journal of Applied Ecology*, vol. 26, no. 3 (1989) 749.

[8] Tamra Gilbertson and Oscar Reyes, 'Carbon Trading – How it works and why it fails', *Critical Currents*, no. 7 (Uppsala: Dag Hammarskjöld Foundation, November 2009) 21. The decrease was 71 percent as of 2007.

and would often work at cross-purposes, thereby frustrating possible agreements to curb pollution. This situation was aggravated when the relationships of parties involved were unfriendly. For example, Japan receives sulphur emissions from China, but relations between the two are testy at best. But even friendly countries were often uncooperative. Norway receives its acid rain largely from Great Britain, but Norway had been complaining about British pollution since the late 1800s. Britain belatedly reduced its emissions because its own citizens and countryside were chocking; Norway's distress was irrelevant. In short, political will was, and remains, rarely equal to the task of addressing transboundary pollution. If governments find it difficult to address transboundary pollution, how much less likely are they to confront carbon emissions given that CO_2 is not a poison, there are no 'downwind' victims, and those who suffer most from global heating might be on the other side of the world?

The long gap from knowing to doing

Further, the hiatus from recognition of acid rain to doing something about it is a disconcerting precedent with regard to climate change. In 1896, Swedish chemist Svante Arrhenius first described the process, including feedback exacerbation, by which Earth's temperature would be increased through humanity's production of CO_2, mainly through combustion of fossil fuels.[9] He and his colleague, Arvid Hogbom, calculated it would take about a thousand years for anthropogenic sources to double the concentration of CO_2 in the atmosphere, so there was no need for alarm.[10] Arrhenius and Hogbom's scientific calculations were fairly accurate, but they could not possibly foresee the astonishing increases in population and industrial output following World War II.

[9] British physicist John Tyndall is usually credited with discovering that CO_2 absorbs infrared radiation [so Mike Hulme, *Why We Disagree About Climate Change* (Cambridge: Cambridge University Press, 2009) 43-45] but American scientist Eunice Foote made the same discovery three years earlier. Tyndall's research was published in 1859; Foote's was presented in 1856 and reported in 1857. She noted that if the atmosphere once contained a higher proportion of CO_2 then 'an increased temperature must have accompanied it' [Raymond P. Sorenson, 'Eunice Foote's Pioneering Research On CO_2 And Climate Warming', *Search and Discovery* Article #70092 (2011)].

[10] Burton Richter, *Beyond Smoke and Mirrors*, 2nd ed. (Cambridge: Cambridge University Press, 2014) 30-31.

Popular Mechanics

In 1912, the widely read *Popular Mechanics* magazine noted that worldwide combustion of coal was adding 7 billion tons of CO_2 annually to the atmosphere: 'This tends to make the air a more effective blanket for the earth and to raise its temperature. The effect may be considerable in a few centuries.' Like Arrhenius and Hogbom, the writer could not have anticipated the huge post-1945 increase in global energy consumption. The writer also noted that, by adding CO_2 to the atmosphere, 'men in generations to come shall enjoy milder breezes and live under sunnier skies', hardly an appropriate conclusion given that the article was prompted by northern hemisphere heatwaves of 1911.[11]

Guy Callendar

In 1938, Guy Stewart Callendar presented a paper that linked the three primary components of anthropogenic climate change: the physical properties of CO_2 , the atmosphere's rising concentration of CO_2; and rising global temperature.[12] Callendar's research modelling was important in demonstrating that humanity's production of CO_2, a tiny addition to a tiny percentage of the atmosphere, could raise global temperatures. He regarded this increase as possibly beneficial in forestalling another ice age.

Gilbert Plass

In 1953, *Time Magazine* reported the findings of Gilbert N. Plass, a Canadian-born physicist. Plass noted the atmosphere's increasing concentration of CO_2 and succinctly explained its greenhouse-like properties. He calculated that if CO_2 continued to increase at the current rate it would raise global temperatures by 1.5 degrees Fahrenheit (roughly 0.8 C) every 100 years. He also described an exacerbating effect caused by slowing the rate at which heat is lost from the tops of clouds.[13]

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[11] Francis Molena, 'Remarkable Weather of 1911: The Effect of the Combustion of Coal on the Climate – What Scientists Predict for the Future', *Popular Mechanics* (March 1912) 339-342. Later in 1912, extracts from this article were printed in New Zealand and Australian newspapers.

[12] Hulme, 50.

[13] 'As the blanket of CO_2 gets thicker, it also prevents the tops of clouds from losing heat as rapidly as before. The smaller temperature difference between cloud base and top cuts down the air currents which must circulate through the cloud before rain or snow can form. Lowered rainfall will make a drier climate. Less cloud cover will be formed, more sunlight will reach the earth, and the average temperature will rise still higher.' ['Invisible Blanket', *Time Magazine* (25 May 1953)].

Revelle and Keeling: rising concentration of atmospheric CO_2

Despite occasional acknowledgement, climate change remained of peripheral public and scientific interest until the 1950s when Californian oceanographer Roger Revelle showed that seawater absorbed CO_2 at only one-tenth of the rate commonly assumed. When Revelle's colleague, Charles Keeling, measured atmospheric CO_2 he showed that Revelle was correct and that CO_2 concentration was increasing inexorably.[14] Their findings prompted renewed investigation into human-induced global heating, but the first world conference on climate change did not take place until 1979, 20 years after Revelle's and Keeling's research.

Frank Capra's *Unchained Goddess*

This two-decade interlude was not the result of ignorance or lack of high-profile messengers. For example, in 1958 the popular Bell Telephone Science Hour screened *The Unchained Goddess* on American prime-time television. Produced by Frank Capra, it was an educational film about meteorology. Towards the film's end, one of its hosts warned that humankind 'may be unwittingly changing the world's climate' through the production of CO_2, noting that 'our atmosphere seems to be getting warmer' and that 'a few degrees' rise in the Earth's temperature would melt the polar icecaps'. If this were to occur, 'an inland sea would fill a good portion of the Mississippi Valley', and tourists would view the drowned towers of Miami through glass-bottomed boats. Illustrative animation left little to the imagination.[15]

Teller's warning

In 1959, Edward Teller – father of the hydrogen bomb and favourite of American government and industry – informed American oilmen about CO_2's 'strange property' of transmitting visible light but absorbing infrared radiation emitted from Earth's surface, thereby causing a 'greenhouse effect'. Teller warned that continued burning of fossil fuel will raise global temperatures and begin to melt the planet's icecaps. He forecast that coastal cities such as New York would be submerged.[16]

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[14] Richter, 31-34.

[15] *The Unchained Goddess*, The Bell System Science Series, screenplay by Frank Capra and Jonathan Latimer (1958).

[16] Benjamin Franta, 'On its hundredth birthday in 1959, Edward Teller warned the oil industry about global warming', *The Guardian* (1 January 2018).

Teller's warning was not unheeded. In 1968, the American Petroleum Institute (API) received a report it had commissioned from the Stanford Research Institute.[17] This report also warned of melting icecaps and rising sea levels. It noted that 'significant temperature changes are almost certain to occur by the year 2000 and these could bring about climate changes'. The report also noted that fine particle emissions, largely caused by fossil fuel combustion, increased the reflectivity of Earth's atmosphere and might have moderated the heating trend of anthropogenic CO_2. However, this was not a reason for complacency, because fine particulates cause chronic health problems. The authors were unsure about the effects of these long-lived pollutants on the global environment, but were in no doubt that potential damage 'could be severe'. The report concluded by noting the irony of our serious concerns with small-scale events such as photochemical smog while we usually ignore abundant pollutants such as CO_2 and submicron particles because they have little local effect but 'may be the cause of serious world-wide environmental changes'.

President Johnson and the Science Advisory Committee

The API was not the only major institution to know about climate change. Shortly after his inauguration early in 1965, President Johnson explained to Congress that its generation had changed the atmosphere's composition by using fossil fuels. Johnson commissioned the Science Advisory Committee to investigate possible consequences. The committee's report, issued later that year, warned of rising sea levels and increasing acidification of fresh water, among other disasters, and asserted that a coordinated global response was required to forestall catastrophe.[18]

Also in 1965, Kenneth Boulding warned that the oceans and atmosphere were not inexhaustible reservoirs: it might be 'fatally easy' for humanity to change the composition of either irreparably. As an example he cited the greenhouse effect, warning it would destroy

[17] E. Robinson and R. C. Robbins, *Sources, abundance, and fate of gaseous atmospheric pollutants*, Stanford Research Institute (February 1968).

[18] Nathaniel Rich, 'Losing Earth: The Decade We Almost Stopped Climate Change', *New York Times Magazine* (1 August 2018) ch. 1.

the planet's existing ecological equilibrium and shift us to one that was far less amenable for human thriving.[19]

The most influential paper on climate change – 1967

In 1967, Syukuro Manabe and Richard Wetherald published their results from modelling feedbacks and interrelationships between the various components of Earth's atmosphere.[20] They found that rising temperatures increase the concentration of atmospheric water vapour. Water vapour is a GHG, so the temperature rises further still – a positive feedback – but additional water vapour also increases cloud cover, reflecting solar radiation and thereby lowering the temperature – a negative feedback. Manabe and Wetherald found that if the atmosphere's CO_2 content were doubled then global temperature would rise by about 2C. Given that atmospheric CO_2 has increased by almost 50 percent since the pre-industrial era, and that global temperature has increased by about 1C, their prediction was remarkably accurate.

Bolin and Commoner

In 1970, *Scientific American* published 'The Carbon Cycle' by Bert Bolin. He stated that since 1850 people had 'inadvertently been conducting a global geo-chemical experiment' by burning fossil fuels.[21] The dynamic equilibrium that had long existed between major CO_2 reservoirs – the biomass, atmosphere, hydrosphere and soil – and on which the biosphere depends, had been disrupted; this might prove injurious or 'even fatal' to humanity. Bolin predicted that atmospheric CO_2 would reach 375-400 ppm by 2000. He was not quite right: the concentration was 370 ppm in 2000 and first reached 400 in 2013. It is now about 415 ppm.

In 1971, Barry Commoner's bestseller *The Closed Circle* clearly described the process by which CO_2 was converted to vegetation in the Carboniferous period, thereby lowering the

[19] Kenneth Boulding, 'Economics and Ecology' in *Future Environments of North America*, F. Fraser Darling and John P. Milton eds (Garden City, New York: The Natural History Press, 1966) 233.

[20] Syukuro Manabe and Richard T. Wetherald, 'Thermal Equilibrium of the Atmosphere with a Given Distribution of Relative Humidity', *Journal of the Atmospheric Sciences*, vol. 24, no. 3 (May 1967). This is now regarded as the most influential climate change paper of all time.

[21] Bert Bolin, 'The Carbon Cycle', *Scientific American*, vol. 223, no. 3 (September 1970) 131.

atmosphere's concentration of CO_2 and cooling the Earth, but this fossilised vegetation was being converted back into CO_2, raising the atmospheric concentration. He warned that 'the effect this may be having on the Earth's temperature is now under intense scientific discussion'.[22]

Jule Charney: the government commissions another report

Despite the above examples – and there were plenty of others – almost no action was taken; not until the late 1970s did momentum for change build again. In response to a request from the Office of Science and Technology Policy, Jule Charney, doyen of modern meteorology, assembled a study group to assess existing research on anthropogenic climatic change. Charney's group met in July 1979 under the auspices of the National Research Council; its report was delivered several months later. The group's findings were unequivocal:

> We now have incontrovertible evidence that the atmosphere is indeed changing and that we ourselves contribute to that change. … If carbon dioxide continues to increase, the study group finds no reason to doubt that climate changes will result and no reason to believe that these changes will be negligible. The conclusions of prior studies have been generally reaffirmed.[23]

The group noted that the world's oceans 'may be expected to slow the course of observable climatic change' but that 'a wait-and-see policy may mean waiting until it is too late'.[24] After considering all known positive and negative feedback mechanisms, the group estimated that, if atmospheric CO_2 were doubled, global heating would be about 3C, with a probable error of $\pm$1.5C. Moreover, the group was 'unable to find any overlooked or underestimated physical effects' that could reduce global heating to 'negligible proportions'.[25] The group estimated

[22] Barry Commoner, *The Closing Circle* (London: Jonathan Cape, 1971) 29-30. Commoner was a leading biologist and renowned ecologist.

[23] National Research Council, *Carbon Dioxide and Climate: A Scientific Assessment* (Washington DC: The National Academies Press, 1979) vii-viii.

[24] Ibid, viii.

[25] Ibid, 1-3.

that CO_2 would double by 2030, though if fossil fuel consumption were halved then this unwelcome milestone could be delayed by 15 to 20 years.[26]

1979: time to act

Charney's report left little more to say. Ken Caldeira, a leading climate scientist, asks his new students to identify the biggest breakthrough in climatic physics since 1979. It's a trick question: there has been more research, refinement of models and so on, but no breakthrough.[27] For over 40 years we have known nearly everything we needed to know if we wanted to address climate change.

Overview: rising fossil fuel emissions

By the late 1960s the dangers of global heating caused by fossil fuel combustion were known and accepted by scientists who worked at or with the highest levels of American government. However, almost no concomitant action was undertaken during the 10-plus years before the first World Climate Conference, held in Geneva in 1979. This inactivity had profound consequences: well over half of all human-generated CO_2 emissions have been produced since 1970. GHG emissions increased on average by 1.3 percent per year from 1970-2000. From 2000 to 2010, 'despite a growing number of climate change mitigation policies', annual emissions increased by 2.2 percent.[28] During both periods, about 78 percent of emissions were from fossil fuel combustion and industrial processes. The most important drivers of increased fossil fuel emissions are economic and population growth. In 2000-2010, the contribution from population growth remained roughly the same as 1970-2000, but the contribution from economic growth rose sharply. In other words, more people are enjoying higher standards of living, and these standards usually entail greater consumption of fossil fuel. In 2000-2010, even though fossil fuels were used more efficiently in producing GDP, these improvements were more than outpaced by total fossil fuel emissions.[29]

[26] Ibid, 6. The current estimate is around 2050 or a few years later.

[27] Rich, ch. 11.

[28] IPCC 2014: *Climate Change 2014: Synthesis Report*, 45. Of course 'policies' do not necessarily entail action, but they do indicate intent.

[29] Ibid., 46-47.

Who is to blame?

The obvious villain is the fossil fuel industry, but its program of denial did not get into stride until the late 1980s. Indeed, in response to the Charney report, Exxon established its own CO_2 research program. This was familiar territory for Exxon. Back in 1957, one of its predecessor companies, Humble Oil, had published a study which found that fossil fuel combustion had increased atmospheric CO_2. Moreover, an API study in 1958 confirmed Humble's findings.[30] Throughout the 1960s and 1970s, both the petroleum industry and the American government had more than enough evidence to compel them to act, but the government failed to provide leadership or appropriate legislation.

However, in 1980 President Carter signed the Energy Security Act. It directed the National Academy of Sciences to analyse the social and economic effects of climate change. Further, Congress invited over 20 experts to a meeting in Florida – appropriately, the venue was only five feet above sea level – to formulate a climate policy. Momentum had built and action was nigh. The 1980s could be the decade when climate change was addressed.

President Reagan deregulates the environment

Then, in January 1981, Ronald Reagan became president. Even members of his own party were concerned by the new president's strident opposition to environmental regulation. For example, he appointed Anne Gorsuch to direct the Environmental Protection Agency. She cut the agency's budget by 22 percent, curtailing its research and enforcement capacities. Democrats *and* Republicans accused her of dismantling the agency.[31]

Despite the new administration's environmental antipathy, climate change was still newsworthy. In March 1982, James Hansen, Director of the Goddard Institute for Space Studies, gave evidence about the greenhouse effect before a congressional committee. The committee's Republican members demanded action; Democrat members, including Al Gore, demurred, believing that a higher level of certainty was required if Congress were to be convinced to undertake reforms of the magnitude required.[32] Gore derided Reagan's

[30] Rich, ch. 3.

[31] Patricia Sullivan, 'Anne Gorsuch Burford, 62, Dies; Reagan EPA Director', *Washington Post* (22 July 2004).

[32] Rich, ch. 7.

environmental myopia, but some momentum had been lost. Nonetheless, the issue retained significant clout.

Eager to position itself favourably in anticipation of legislative change, Exxon continued to invest in climatic research. The corporation funded a climate change symposium in October 1982, sending the president of its research division, Edward David, former science adviser to President Nixon, to deliver the keynote address. David asserted that the free market could not fix the greenhouse effect, and that Exxon's research into renewable energy would put it in the vanguard of action to combat global heating.[33] The White House might resist change, but nobody could resist Exxon.

Lost opportunity: National Academy of Sciences report, 1983

In October 1983, three years after being commissioned by President Carter, the National Academy of Sciences delivered its report on global heating. The Academy's report was comprehensive, though contained little of substance that had not been addressed by the Charney group. The Academy largely confirmed previous research, though its conclusions were very restrained. Doubling of CO_2 would raise temperatures by 1.5C to 4.5C, though 'values in the lower half of this range are more probable'. Atmospheric CO_2 will probably hit 600 ppm by about 2070, with a 1-in-4 possibility before 2050. Indeed, additional CO_2 'should have beneficial effects on photosynthesis and water-use efficiency of agricultural plants'.[34] Then came some bombshells:

> In view of the relatively large and inadequately unexplained fluctuations over the last century, we do not believe that the overall pattern of variations in hemispheric or global mean temperature or associated changes in other climatic variables yet confirms the occurrence of temperature changes attributable to increasing atmospheric CO_2 concentration.

[33] Rich, ch. 8; and see Lisa Song, Neela Banerjee and David Hasemyer, 'Exxon Confirmed Global Warming Consensus in 1982 with In-House Climate Models', *Inside Climate News* (22 September 2015).

[34] National Academy of Sciences, *Changing Climate: Report of the Carbon Dioxide Assessment Committee* (Washington DC: National Academy Press, 1983) 2, 91, 94.

> Although a precautionary attitude toward any drastic changes in world climate is prudent, we do not know that there actually is a problem until we have completed the investigation of what changes in climates may occur and what damages or blessings they may bring.[35]

The report asserted that future generations of Americans would be well placed to deal with climate change:

> The foreseeable consequences of climate change are no cause for alarm on a global scale but could prove to be exceedingly bad news for particular parts of the world. Generally, the more well-to-do countries can take in stride what may prove to be a reduction (probably not noticeable as such) by a few percent in living standards that will likely be greater per capita by more than 100% over today's.[36]

The social and economic implications of climate change are largely unpredictable:

> Rapid climate change will take its place among the numerous other changes that will influence the course of society, and these other changes may largely determine whether the climatic impacts of greenhouse gasses are a serious problem.
>
> As a human experience, climate change is far from novel; large numbers of people now live in almost all climatic zones and move easily between them.[37]

The Academy therefore recommended business as usual:

> We do not believe, however, that the evidence at hand about CO_2-induced climate change would support steps to change current fuel-use patterns away from fossil fuels.[38]

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[35] Ibid., 292, 450 (underlining in original).

[36] Ibid., 481. Bangladesh was cited as one of the 'particular parts' of the world.

[37] Ibid., 3. In essence, this paragraph is saying that people experience climate change whenever they move to a different climatic region. The report's attempt to 'normalise' climate change is clear.

[38] Ibid., 4.

adding that such action was improbable:

> It is unlikely in the foreseeable future that national governments will embark on serious programs to reduce further their dependence on fossil fuels to protect the Earth's climate against change.[39]

and that no country will act alone:

> Any single nation that imposes on its consumers the cost of further fuel restrictions shares the benefits globally and bears the costs internally.[40]

Unsurprisingly, Exxon cancelled its CO_2 research program and reverted to being a conventional fossil fuel supplier.

The report noted that some food-producing areas would receive less rain and therefore yield less food unless there were compensating improvements in water conservation or supply, or in agricultural technology. Policy-makers would have to decide whether it was more economical to reduce production of CO_2 or to increase the supply of water. The report warned that defining the issue as 'the CO2 problem' would 'focus attention too exclusively on energy and fossil fuels, compared with the water or the rainfall problem or, more evenhandedly, the issue of climate change'[41] – 'issue', not 'problem' of climate change.

The Academy then made a profoundly prescient statement:

> How the issue is named can affect its apparent character. If the solution to foreseeable problems has to be reduced CO_2 emissions, both the problem and the solution are global in a severe sense.[42]

[39] Ibid., 480.

[40] Ibid., 481.

[41] Ibid., 450.

[42] Ibid.

The Academy rightly argued that a ton of CO_2 produced in one part of the world had the same effect as a ton produced somewhere else, so worldwide reductions would have to be agreed, whereas 'water development and conservation is usually a national responsibility or involves a few neighbouring countries'. In other words, if you call increasing desiccation a 'water problem' then it's your responsibility and you can address it locally, whereas if you call it a 'greenhouse gas problem' then it's everybody's responsibility – to the degree each country emits GHGs – and requires international agreement. Clearly the former is much easier to ameliorate, and is politically more attractive, than the latter.

The need for a trope

There is more to it, however. Why did the thinning of stratospheric ozone attract vigorous and effective action? After all, this action was robustly opposed by CFC producers and therefore required international agreements, and the problem mainly affected Antarctica and not the most populous parts of the world. Of course, phasing out production of CFCs was much easier than achieving the same for fossil fuels, but an important reason for action is that the problem found an effective trope: there was a 'hole in the ozone layer'. It is irrelevant that there is actually no hole and no ozone layer. There is a very diffuse 'layer' of ozone (the ozonosphere) in the middle stratosphere, but its concentration of ozone molecules never exceeds 15 ppm and is usually less than 10 ppm. The ozonosphere above Antarctica naturally attenuates between September and November, but this has been exacerbated by CFCs.[43] The ozone hole of public nightmares was a series of coloured satellite images that depicted areas of lower ozone concentration. The darker shades looked like a hole, so the problem found its trope.[44]

However, a trope must not only be evocative but also indicative of a solution. Ozone had its hole; the obvious solution was to close it. Importantly, ozone was quickly accepted as a 'political' problem because political problems need to have identifiable and achievable

[43] *The New York Public Library Science Desk Reference*, Patricia Barnes-Svarney ed. (New York: Macmillan, 1995) 482-483.

[44] I am using 'trope' in the broad sense of words used in ways that change or extend their standard meaning. For example, in political discourse 'schools' stands for the education system, an instance of synecdoche. Tropes often convey a 'surplus' meaning. 'Schools' is so often used in combination with 'lack of funding' that its mere use connotes 'additional funding'.

solutions. As things stand, global heating lacks a trope that might identify *and* drive a solution, and it is not yet a political problem in the above sense. There was ample evidence for this in Australia's federal election of 2019. Even though polling consistently found climate change to be a highly significant issue for the electorate, neither major party presented policies that reflected this importance. Other important issues, such as public health, possess emotive tropes – hospitals and medical staff, for example – that in and of themselves also suggest a solution – more buildings and nurses.[45] In the contest for political attention and funding, no political party is going to fund a very broad-ranging program with distant, amorphous goals and no catchphrase, rather than pay for a new clinic.

Individual responsibility?

Neglecting to address climate change has not all been on the part of governments and corporations. For example, Barry Jones was, and remains, one of the most comprehensively knowledgeable people in Australia. He was federal minister for science from 1983 to 1990. His book *Sleepers Wake!* is a deeply researched and wide-ranging investigation about the ways technology will influence the future of work. It was first published in 1982, so Jones' neglect to mention climate change was regrettable given that the first World Climate Conference had been held three years before. The conference's focus had been the impact of global heating on agriculture, water, economies and so on; the implications of climate change for technology and employment were clearly significant. Moreover, scientists from 50 countries agreed unanimously that urgent action was necessary.[46] The fourth edition of *Sleepers Wake!*, revised and enlarged, was published in 1995, but again climate change was overlooked. In a chapter entitled 'What Is To Be Done?', comprising 23 categories of advice and discussion about 'a political program for survival and enhanced quality of life', the only mention of any environmental matter was 'an energy efficiency tax (a.k.a. "carbon tax")', but this was only with a view to inducing industry and consumers to find the most efficient ways

[45] This is probably the main reason preventive health, by far the most cost-effective approach to public health, rarely attracts adequate funding or attention. Preventive health is open-ended and lacks an emotive symbol or goal. Ergo, much more money is allocated for treating cancer – clinics, MRI machines and so on – than for preventing it.

[46] Later in 1979, leaders of the Group of Seven – the seven wealthiest countries – signed a resolution to reduce carbon emissions [Rich, Introduction].

to produce and use energy.[47] Undoubtedly dozens of related books by lesser minds also failed to discuss climate change, but it is disquieting that a book about technology and the future, written in a country that will suffer more than most from global heating, should say nothing about it.

Jones' book is an instructive example of how predictions are made by extrapolating from current situations and paradigms. The problem is that, when something novel arises, something that does not appear to fit our existing patterns of experience, we lack a handy framework from which to understand and deal with it.

Summary

The above account largely concentrates on the United States because it was by far the largest single emitter of CO_2 up to the turn of the century.[48] According to Nathaniel Rich, the years 1979 to 1989 constituted the 'decade we almost stopped climate change'. America might, and indeed should, have taken the lead in addressing global heating, but – *pace* Rich – it was nowhere near to almost stopping climate change. Several governments and administrations were genuinely concerned about the matter, but all baulked at the prospect of undertaking a comprehensive reorganisation of the country's transport and energy systems, let alone of persuading other countries to follow suit. Some corporations, such as Exxon, engaged in research in order to anticipate and possibly take advantage of proposed legislation, but it is naïve to think that, without government leadership and coercion, corporations would or even could act in the long-term public interest.

In addition to curbing momentum on GHG mitigation, the National Academy of Sciences report also established the subjects, perspectives and directions of future debate: various climatic phenomena remain unexplained and some scientific evidence is still contested; future generations will be wealthier and better placed to deal with global heating; adaptation is cheaper and easier than mitigation; it is easier to discuss and deal with local problems than to address 'the CO_2 problem'; climate change will be one of many future impacts on society, so undue emphasis on it is misplaced; any single country would be

[47] Barry Jones, *Sleepers, Wake!*, 4th ed. (Melbourne: Oxford University Press, 1995) 246-256.

[48] China's CO_2 emissions overtook America's in about 2007.

unwise to act alone; and the costs of addressing climate change must be acceptable to consumers.

Postscript

What about the relevant and successful policies noted above, such as those to combat air pollution? Nearly half a century after the Clean Air Act, more Americans – 43.3 percent – than ever are now living in areas with unhealthy air. Besides population growth, the overwhelming reason is climate change.[49] Days with high concentrations of ground-level ozone (intensified by hot, sunny weather) are more frequent, as are days with high particulate pollution (exacerbated by windblown dust, and smoke from bushfires). Climate change is already negating the hard-won successes of existing pollution laws.

Climate change before global heating – deforestation and desiccation

The above account concentrates largely on the period following World War II, but our forebears have known about climate change since at least the 300s BCE. Probably the first to write about the effects of human activity on climate was Theophrastus, an associate and then successor of Aristotle at the Lyceum in Athens. Theophrastus noted that activities such as deforestation – which he linked to declining rainfall – and drainage could influence the climate of entire regions. He observed that around Larisa, the chief city in Thessaly (northern Greece), there used to be a lake and other bodies of water. When these were drained the region became colder and frosts more common, and the area was no longer able to sustain large olive trees. The country around Philippi, in eastern Macedonia, became warmer after being drained and deforested. Agriculture had been rendered impossible on Crete following extensive deforestation.[50] Richard Grove applauds Theophrastus's 'precocious theories of desiccation' but notes that they do not seem to have motivated any ancient government to restrict deforestation.[51]

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[49] *The State of the Air 2019*, a report of the American Lung Association.

[50] Theophrastus, *De causis plantarum*, 5.14.2-5; *De ventis*, 13. For a good overview see J. Donald Hughes, 'Theophrastus as Ecologist', *Environmental Review*, vol. 9, no. 4 (winter, 1985) 296-306.

[51] Richard H. Grove, *Ecology, Climate and Empire* (Cambridge: White Horse Press, 1997) 44, and *Green Imperialism* (Cambridge: Cambridge University Press, 1995) 20.

Colonial climate change

Indeed, ideas about human-induced climate change do not reappear until the initial period of European colonialism in the early 1400s. Spanish and Portuguese seizure of Atlantic islands – Madeira, the Canary Islands and the Azores – resulted in widespread clearing of forests. According to his son and biographer, Ferdinand, Christopher Columbus knew 'from experience' that deforestation had reduced rainfall and mist on these islands. He feared the same result if forests were removed from Caribbean islands.[52] This was probably the first post-classical reference to desiccation caused by deforestation, and the forerunner of many over the following four centuries.[53]

There are a number of reasons for the importance of this period with reference to current thinking about climate change. The first is that people were able to observe the rapidity with which their activities changed the environment. Global heating is incremental and largely imperceptible, and much of Western Europe had long been deforested,[54] but the newly exploited tropical landscapes were largely intact. The deleterious effects of land-clearing on unspoiled regions were quickly evident. This was a significant factor in promoting the influence of natural scientists whereby colonial governments became susceptible to pressure from this early environmental lobby.

Second, observations of landscape destruction stimulated dramatic growth of scientific interest in desiccation theories. This led to large-scale forest conservation programs,

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[52] Kenneth Thompson, 'Forests and Climate Change in America: Some Early Views', *Climatic Change*, 3 (1980) 47.

[53] Columbus and those who came before and after him were right. Tropical rainforests can influence precipitation on areas hundreds of kilometres downwind. Deforestation reduces evapotranspiration of moisture from vegetation and soil, thereby reducing atmospheric humidity. A 2012 study found that air passing over dense forest produces at least twice as much rain as air passing over sparse vegetation. This study forecast reductions of 12 percent (wet season) and 21 percent (dry season) in rainfall across the Amazon basin by 2050 if deforestation continued at the current rate [D. V. Spracklen, S. R. Arnold and C. M. Taylor, 'Observations of increased tropical rainfall preceded by air passage over forests', *Nature*, vol. 489 (13 September 2012) 282-285].

[54] For example, almost all primeval English woodlands had been removed a millennium *before* the Roman conquest in 43 CE [Christopher Taylor, Introduction and commentary in W. G. Hoskins, *The Making of the English Landscape* (Sevenoaks, Kent: Hodder and Stoughton, 1988) 8, 17.

particularly in French and British colonies. For example, in 1763 Pierre Poivre, the superintendent of Mauritius, delivered a speech in Lyons that specifically addressed the climatic consequences of deforestation – probably the first ever speech on climate change. Shortly thereafter, newly acquired British colonies in the Caribbean set aside large areas of mountain terrain as forest reserves for the 'protection of the rains'.[55] They were the world's first forest reserves established for the specific purpose of preventing climatic degradation. Indeed, the ordinance issued in 1765 for Barbados states that forests should be preserved 'to prevent that drought which in these climates is the usual consequence of a total removal of the woods'.[56] In 1769, Poivre establish similar reserves on Mauritius. The idea that governments, informed by scientific expertise, would act to address climate change is more than two centuries old.

The third reason follows from the second, but highlights its other face. The absolutist quality of colonial government made it possible to impose land-use management schemes that would have been very difficult to implement in Europe. Indeed, policies to address desiccation and soil erosion, and to promote sustainable agriculture, were frequently perceived as heavy-handed attempts to control land use, and were often resisted by indigenous people, non-indigenous local inhabitants and private companies. As Richard Grove states, these reactions could coalesce into a typology of resistance and were sometimes the catalyst of significant political change.[57] In practice, a few administrations – the pre-Raj British East India Company was one – did to some degree appreciate the value of indigenous expertise and local knowledge, and occasionally developed land management schemes accordingly.

Fourth, in the post-colonial era many governments have repeated the environmental blunders of their colonial predecessors, but with vastly more destructive consequences. These mistakes include disregard of, and disdain for, indigenous and traditional knowledge; industrial-scale deforestation; and the destructive imposition of 'prestige' projects such as dams. It is noteworthy that colonial governments were usually aware of the tension between short-term capital interests and the state's long-term environmental concerns, and were often

[55] Grove, *Ecology*, 11. Mauritius was at this time known as the Isle de France.

[56] Quoted in Grove, *Green Imperialism*, 271.

[57] Grove, *Ecology*, 1-3, 147-178.

prepared to override the former in favour of the latter. Moreover, the state wanted to prevent or limit environmental degradation that might have undermined long-term economic and/or political viability.[58]

The fifth reason is that environmentalism, and more specifically attempts to address climate change, are often viewed as anti-industry and anti-capitalist, whereas the colonial experience was sometimes the opposite. Ideas about conserving the environment developed alongside endeavours to supply the raw materials demanded by new and expanding industries. So far from being anti-industry, the 18th century's nascent environmentalism was an essential, if sometimes awkward and unwelcome, part of Enlightened capitalism.

Further, we often regard environmental consciousness as an offspring of the Romantic period, conventionally dated to begin in the late 1700s as a reaction against the 'satanic mills' of industry. Clearly this is incorrect: environmental discourse long predated the Romantic era. It arose as an intrinsic part of scientific discourse in response to the environmentally and socially destructive effects of colonial rule.[59] Further, an important motivation for colonial conservation was aesthetic: from the mid-1600s to the mid-1800s colonial discourse was significantly influenced by ideas of tropical Edens and Arcadias. The works of Edmund Waller (1606-87), Andrew Marvell (1621-78) and John Milton (1608-74) are among many that invoked paradisal, Edenic or Arcadian motifs.[60] There is a grim irony in the fact that environmental conditions in home countries were often poorer than in the colonies they administered and exploited.

The sixth reason is that desiccation theories lacked a global perspective, and the concomitant perception of scientific rigour, until about 1840. Very few people extrapolated from observations of climate change on islands to the belief that similar change could occur on a continental or global scale.[61] This began to change with the publication of Alexander von Humboldt's account of his travels in South America from 1799 to 1804. The fourth

[58] Ibid., 184.

[59] Grove, *Green Imperialism*, 485-486.

[60] For example, Waller's *The Battle of Summer Islands*, Marvell's *Bermudas* and *The Garden*, and of course Milton's *Paradise Lost*. See also Grove, *Ecology*, 184-185.

[61] Grove, *Green Imperialism*, 365.

volume (1819), published in French and immediately translated into English, contained his observations on the effects of deforestation in Venezuela. Von Humboldt noted that forest destruction and land-clearing caused natural springs to dry up, soil erosion, flash flooding and 'dryness of the atmosphere'.[62] Thereafter, expanding inter-colonial and international contact between scientists reinforced the perception of a global environmental crisis. In 1858, J. Spotswood Wilson delivered a paper with the indicative title 'On the General and Gradual Desiccation of the Earth and Atmosphere' to the British Association for the Advancement of Science. Wilson raised the spectre of global climate change and concomitant human extinction, though did not regard widespread deforestation as a sufficient explanation for what he regarded as 'geological changes' to the Earth's atmosphere and water. Wilson's paper marked the activation of international research and debate on global climatic processes.[63]

It is clear from the above that colonial environmentalism provides some salutary lessons for 21st century attempts to address climate change. Governments *are* able to restrain the desire of corporations for short-term advantage in favour of a state's long-term viability. Governments and societies *are* influenced by, and may act according to, prevailing aesthetic ideals. Governments *are* influenced by their scientists, particularly when those scientists are members of international research bodies that can make pronouncements of global scope and significance. Governments will probably encounter less resistance by imposing environmental schemes on a whole country rather than on discrete communities, because those communities may perceive they are being bullied by outsiders – redolent of colonialism – who want to foist their programs on locals.[64] Conversely, if governments develop schemes which incorporate local concerns, knowledge and expertise, the result will probably be better schemes that provoke less resistance.

A further point concerns the long history of action to address local effects of climate change in contrast to lack of action to tackle global heating. It may be that the global dimension of climate change is too general and remote to arouse effective action. Better results might be achieved if global heating were framed primarily in terms of local effects.

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[62] Quoted from ibid. 367.

[63] Grove, *Green Imperialism*, 469-470; *Ecology*, 17.

[64] Recent elections in the United States and Australia, and the Brexit referendum in Britain, provide clear examples of local resistance to perceived 'outside' imposition.

Conclusion

We tend to think of climate change as a recent phenomenon, and that addressing it is now imperative. This is misleading: the concept of climate change has been part of our collective psyche for centuries, and the imperative to do something about anthropogenic global heating has been recognised for over half a century. We have noted some precedents for such a delay. Here is a further example: there was half-century hiatus between knowing about the pain-killing properties of nitrous oxide (laughing gas) in 1795 and its use as an anaesthetic. In other words, for 50 years people undergoing surgery endured excruciating pain, and often fatal shock, when a remedy was available. Consider a parallel situation: having identified a cure for dementia, what if we failed to implement it until 2060? The generations after us would want to know why, and would probably look for explanations in deep-seated social, political and human problems. It is to some of these fundamental problems that we now turn.

Madness is rare in individuals – but in groups, parties, nations and ages it is the rule.[1]

The flood of precise information and brand-new amusements makes people smarter and more stupid at once.[2]

Our civilization is not only going to be destroyed by power and avarice gone berserk but by sheer incompetence.[3]

Chapter 3
Folly: a venerable and formidable foe

Overview

Climate change has been recognised for decades, and governments have occasionally listened to scientists, so why can't we seem to do much about global heating? The reason we most readily invoke is that our failure constitutes a momentous act of folly. But what is folly and why might recognising it be a critical step in confronting global heating? Folly is a formidable entity that enjoys a venerable and celebrated heritage. Indeed, it is folly to underestimate it.

Folly – more than stupidity

Stupidity is a precursor of folly, but folly is more than stupidity. All of us occasionally make stupid mistakes, but it is folly to repeat what you previously recognised as a mistake. Such repetition is not mandatory: it is also folly to act stupidly in situations where the stupidity of one's act is plain to see. Folly is interesting, and worrying, because it appears to resist comprehension. We can make sense of a poor or stupid decision by examining its mistaken assumptions and inaccurate weighing of factors, but rational criticism seems a wan instrument to shed light on a decision that a person's own experience had previously shown to be wrong or where that person disregarded obviously better alternatives. Instead, folly

[1] Friedrich Nietzsche, *Beyond Good and Evil*, #156.

[2] Max Horkheimer and Theodor W. Adorno, *Dialectic of Enlightenment*, Edmund Jephcott trans. (Stanford: Stanford University Press, 2002) xvii.

[3] I. Robert Sinai, *The Decadence of the Modern World* (Cambridge, MA: Schenkman Publishing, 1978) 112.

appears to invite psychological investigation of problems such as group-think, or political investigation of matters such as conflicts of interest, or simply head-scratching despair. It is hardly surprising, then, to find that folly has received little attention from philosophers, though stupidity has been less neglected.[4] It is to stupidity, therefore, that we first turn.

Kant: stupidity as erroneous judgement

Immanuel Kant's explanation of stupidity is relevant to at least one important aspect of the current debate about climate change. Kant regarded stupidity as a deficiency of judgement:

> The power of judgement is a special talent which cannot be taught … the absence of which cannot be remedied by any schooling. … Deficiency in the power of judgment is really what we call stupidity, and there is no remedy for that.[5]

In Kant's transcendental schema, understanding is the capacity to form concepts or rules, and judgment is the capacity to apply them – that is, to judge whether something falls under a given rule. Understanding is capable of being educated and better equipped with concepts, whereas judgment cannot be taught; one either has it or lacks it. As Kant notes, this is why a judge may know a lot of juridical rules, and may even be able to teach them, but still blunders in applying them. For our purposes, the attraction of Kant's view is that it can explain at least some acts of folly: if I lack innate judgment, and if I erroneously judge that something applies under a given concept, then it will not be surprising if I repeat that mistake.

Errors of judgement

For example, one principle that attracts a surfeit of erroneous judgment is freedom of speech. In America this freedom is protected under the first amendment of the Constitution. In essence, freedom of speech safeguards a person's right to criticise institutions and people who are more powerful than she or he is. Given that governments and powerful individuals

[4] Probably the most famous work on the subject is *Praise of Folly* by Erasmus. This is largely a satire on society, an attack on church dignitaries and theologians, and an appeal to simple Christian piety. It is not an analysis of folly itself.

[5] Immanuel Kant, *Critique of Pure Reason*, Marcus Weigelt trans. (London: Penguin Classics, 2007) 173-174.

and organisations are able to criticise with near impunity, when they complain about freedom of speech we can be fairly sure they are not referring to the same principle to which the rest of us refer. Their abuse of the principle distorts its legitimate application. For example, some have interpreted freedom of speech to include the right to harass women at the entrance to abortion clinics. In response, various courts have ruled that anti-abortion proponents may not encroach within a specified distance from a clinic. Proponents have interpreted these rulings as restrictions on their constitutional or legal freedom to express their opinion. Kant's view would be that these people lack judgment. Even if they possessed a sound theoretical grasp of free speech, they are incorrect in categorising their activities under it. For Kant, freedom of speech concerned a citizen's public right to discuss and criticise laws and complain about injustice, and the freedom to publish those criticisms and complaints.[6] Kant was particularly alert to suppression of public freedoms, having himself been temporally banned from lecturing and publishing on religion. His response to those who protest outside abortion clinics would be that they misunderstand the concept of free speech. They already possess and exercise this freedom in that they are allowed to criticise governments about, and publish their views on, abortion, but they are simply wrong if they further maintain that this freedom includes the right to bully those with whom they disagree.

What about appealing to Kant's view that an individual should refuse to comply with a law that, if obeyed, would compel that person to act immorally? This does not justify harassing women, because those campaigning against abortion are not being compelled to do anything. The state is not pr*e*scribing abortion, merely allowing it. Moreover, Kant would condemn the use of coercion, let alone violence, to resist something that the state permits.[7]

Appeals to free speech are frequently made by those who oppose taking action on climate change. For example, David Whitehouse (an astrophysicist who is a global heating sceptic) rejects the view that 'free speech does not extend to misleading the public by making factually inaccurate statements'. He notes that the principle of free speech, which took millennia and cost many lives to achieve, 'does not mean that you have to be factually

[6] For a good summary see Peter P. Nicholson, 'Kant, Revolutions and History' in *Essays on Kant's Political Philosophy*, Howard Lloyd Williams ed. (Chicago: University of Chicago Press, 1992) 249-268.

[7] Nicholson, 251.

accurate'.[8] Again, Kant would respond that Whitehouse lacks judgment. Kant certainly agrees that attainment of free speech was a long and costly struggle, but would add that Whitehouse misses the point. The struggle was sustained and difficult because it was against, and about the right to criticise, more powerful bodies – the state or various institutions. It had nothing to do with the 'right' to mislead fellow citizens.[9] Whitehouse is attempting to conflate the struggle against action on climate change with the struggle for free speech.

Hume on obtuseness

Deficiency of judgement is usually accompanied by obtuseness: if you lack judgement then you probably won't realise how obtuse you are. A good example was the forum in which leading climate scientist Stephen Schneider answered questions from an audience of 52 climate change sceptics. Schneider more than satisfactorily answered every question put to him, yet by the conclusion of debate only two people had tentatively changed their views.[10] David Hume – *qua* historian rather than philosopher – would not have been surprised. In his *History of England* he notes there are certain matters about which some people will never change their mind:

> There are indeed three events in our history which may be regarded as touchstones of party-men. An English whig who asserts the reality of the Popish plot, an Irish Catholic who denies the massacre in 1641, and a Scotch Jacobite who maintains the

[8] Whitehouse is quoted by Ian Johnston in 'Climate-change sceptic says they should have right to "mislead public" because of free speech', *The Independent* (30 March 2017).

[9] Similarly, those who regard compulsory wearing of face masks (to prevent infecting others with Covid-19) as an infringement on their civil liberties are appealing to the wrong category. A government's directive to wear masks is no more an infringement on personal liberty than a law to obey speed limits. In both cases the government is rightly deciding that your desires – to drive as fast as you want, or not to wear a mask – carry less weight than the rights of other people not to be killed by your dangerous driving or be infected by you. As John Stuart Mill stated, 'the only purpose for which power can be rightfully exercised over any member of a civilised community, against his will, is to prevent harm to others' ['On Liberty' in *On Liberty and Other Essays* (Oxford: Oxford University Press, 1991) 14].

[10] 'The Sceptics', SBS *Insight* (31 May 2010). Sadly, Schneider died a few weeks after this program was produced.

> innocence of Queen Mary, must be considered as men beyond the reach of argument or reason, and must be left to their prejudices.[11]

Three modern equivalents might be: a neo-nazi who asserts that *The Protocols of the Elders of Zion* is factual, an Australian 'nationalist' who denies that indigenous people were massacred at Myall Creek, and a communist who maintains that Stalin is innocent of Trotsky's assassination. A comparable fourth might be: people who regard climate change as a green plot.

Hume's point, however, is somewhat confused: if I am a member of a faction or party then it would be unsurprising if I maintained the beliefs of that group. Perhaps, though, the point is cumulative: being a member of a party entails that I endorse its beliefs, or most of them, and if I also maintain its more outrageous beliefs then I am probably a 'true believer' and thereby very unlikely to be swayed by rational, factual argument. Is true belief of this sort a form of stupidity? Not necessarily, though it can degenerate into stupidity. For example, among the many people who were true believers in Soviet communism, including its more outrageous claims, were some very smart people who exercised a good deal of critical acumen in formulating their views, but once these views were consolidated their intellect failed to prevent them from believing, or at least affirming, patent lies.[12]

In general, a person is surely engaging in a form of stupidity to the degree that his or her beliefs are not based on fact, where facts are readily available, and reasoned argument. In other words, that person cannot provide a rational justification for holding those beliefs. According to Hume, there is nothing to be done with such people other than allowing them to wallow in their prejudices. The parallels with those who deny climate change, such as the audience which rebuffed Stephen Schneider, are obvious.

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[11] David Hume, *The History of England*, vol. I, part D, From Elizabeth to James I, (Project Gutenberg EBook – originally published 1754-1762) note N, p. 111. The Popish plot of 1678 was a fiction about a Jesuit conspiracy to assassinate Charles II. The massacre of 1641 was of about 2,000 Protestant settlers in Ireland; it provided fodder for English propaganda and Cromwell's reprisals of 1649-50. Hume's third example is less convincing: it is likely, but not certain, that Mary Queen of Scots was complicit in the murder of her husband, Lord Darnley.

[12] Such as the claim that Soviet citizens enjoyed a free press and freedom of religion. These were 'patent lies' because there was ample evidence to prove otherwise.

Epistemic efficacy and vitality of stupidity

Can stupidity be useful? Catherine Elgin has argued that stupid people may occasionally know more about something than smart people. She uses the imagined example of Sherlock Holmes and Dr Watson sighting what looks like a superb starling in London. Holmes knows that this distinctive and brightly coloured bird is a native of equatorial Africa, not Britain, and so concludes that it is more likely to be a vividly marked local bird. Watson knows what a superb starling looks like, but does not know where it comes from and, unlike Holmes, does not understand the complex statistical correlation of avian colouring with temperature of habitat. Watson concludes that the bird is indeed a superb starling. He is right; this bird has escaped from London Zoo. Holmes is wrong; his broader and cleverer purview has misled him. According to Elgin, Watson's ignorance put him at an epistemic advantage: 'Watson's ignorance thus enables him to know what Holmes cannot'. Further, Watson's inability to comprehend or appreciate the statistical correlation means that 'his stupidity, not just his ignorance' have enabled him to know something that is unknown by his more intelligent colleague.[13]

There are several fundamental problems with Elgin's argument. The most significant is her too-limited understanding of both ignorance and stupidity. Ignorance is not merely lack of knowledge about something. For example, if I don't know that increasing the proportion of atmospheric CO_2 will lead to higher global temperatures, then I can rectify my ignorance by, say, reading a scientific report on climate change. But what if I simply do not want to know, because I could not be bothered or do not want to know anything that could compromise my affluent lifestyle? At this point my ignorance is more than merely not knowing: it has acquired a moral dimension. For instance, if we said to Watson, 'Your knowledge of birds is rather scanty', he might reply, 'I'm not much interested in birds, so I don't care to know more'. Our response would probably be, 'Ah, that's all right then'. On the other hand, if we said to a latter day Watson, 'Your knowledge of climate change is rather scanty', and he replied, 'I'm not much interested in it, so I don't care to know more', our response would not be, 'Ah, that's all right then'. Rather, our sharp retort would be, 'Well,

[13] Catherine Z. Elgin, 'The Epistemic Efficacy of Stupidity', *Synthese*, vol. 74, no. 3 (March 1988) 305-306.

you *ought* to be more interested and you *should* try to know more'.[14] In this example, it is possible that Watson might get fewer facts wrong than somebody who is campaigning to address climate change but whose grasp of the science is rather haphazard. Is Watson, therefore, at an epistemic advantage over that person? Not unless we allow that 'epistemic advantage' can include being intentionally and irresponsibly ignorant about a subject that demands epistemic commitment.

But how much commitment? Elgin rightly asserts that one cannot know everything about a subject – birds and climate change are just two among myriad inexhaustible areas – so some or even a lot of information about a subject must necessarily be ignored. After all, not even a climate scientist could make a statement about global heating if we demanded she know all there is to know about it before making a statement. What, though, is the difference between the necessity to ignore information and latter day Watson's intentional ignorance? This difference is not a subjective assessment: we have already rejected the view that blithe ignorance about climate change is acceptable. Elgin argues that the epistemic community decides what is important and how much is enough to know, and that 'epistemic resources count as accessible if they are available to normal members of the community'.[15] Elgin is right, but her assertion also conceals a problem with acceptable knowledge of issues wherein the epistemic community's values and so on are largely irrelevant. For example, if the community construes a certain level of knowledge about climate change as 'adequate', but that level is inadequate to address the issue – because it fails to motivate appropriate action or generate creative inquiry and so on – then the epistemic community is irrelevant (or plain wrong), not because it *cannot* construe epistemic standards but because those standards are clearly deficient in being fundamentally out of kilter with the scientific evidence they purport to understand.

There is a further, and related, matter. The epistemic community not only decides what information is important but also, often inadvertently, locates the moral gravity of an issue. If

[14] This dialogue is modelled on a similar exchange in Wittgenstein's 'A Lecture on Ethics', in *Philosophical Occasions 1912-1951* (Indianapolis: Hackett Publishing, 1993) 38-39.

[15] Elgin, 308. Elgin cites Gilbert Harman as the inspiration for this idea, but before Harman the idea of socially construed epistemic standards had been addressed by Wittgenstein in the *Philosophical Investigations* – particularly #241-242 – and in *On Certainty*.

the community demands a very high level of epistemic engagement with climate change, this level also (indeed necessarily) implies a moral statement. In other words, this is not merely a demand for adequate scientific literacy – such as the expectation that people know they live in a heliocentric solar system and that Earth is more than 10,000 years old – of the sort that does not necessarily (or at all) imply a moral imperative. Rather, this very high level of engagement is itself a moral imperative. Why? Because the overriding reason for the high epistemic level is to stimulate appropriate action to address climate change. If anybody were to argue that this is not a moral imperative, there is an obvious retort: if we know what climate change entails, and we know the consequences of failing to act, and we do nothing, then we are morally culpable. To suggest otherwise would be much the same as arguing that, if I saw a child wandering towards a busy road, my observation would not necessarily imply a moral imperative to act. To the contrary, my observation clearly *does* entail an obligation, otherwise I have a pathological misunderstanding of the form of life in which I live and communicate, and in which children are implicitly protected.[16] Indeed, to argue otherwise about children would be to misunderstand what an argument is.[17] In this light, the venerable philosophical problem of whether an *is* can ever imply an *ought* seems rather jejune.[18]

There is another, fundamentally important, problem with Elgin's argument: her equation of stupidity with an incapacity to understand something. Watson cannot grasp a statistical analysis of bird colouration, but that does not entail he is stupid. Indeed, most people struggle with statistics, even those who are supposed to understand them. For example, staff and students of Harvard Medical School were asked the following: if a disease has a prevalence rate of 1 in 1,000, and if the test for it is 95 percent accurate (5 percent of results are false positives), what is the chance you have this disease if your test is positive? About

[16] The term 'form of life' (*Lebensform*) is Wittgenstein's. It refers to the intertwining of language, world-view and culture that forms the ground upon which we communicate and invest our lives with meaning. For an overview, see Hans-Johann Glock, *A Wittgenstein Dictionary* (Oxford: Blackwell, 1996) 124-129.

[17] In brief, a debate should be about debateable matters, such as the appropriate level of funding for government schools. There can be no real debate with people who deny the Holocaust, for example, as if the existence of these events were a debateable subject.

[18] As Ronald Kramer and Raymond Michalowski argue, our knowledge of climate change entails not only that we *ought* to address it but that it should be a *crime* not to do so, as it would be a crime if I allowed the child to wander onto the road ['Is Global Warming a State-Corporate Crime?' in *Climate Change from a Criminological Perspective*, Rob White, ed. (New York: Springer, 2012) 84].

half of respondents thought the answer was 95 percent. Fewer than one-fifth gave the correct answer of 2 percent.[19] According to Elgin's criteria, this means four-fifths of Harvard Medical School are stupid. This is unlikely, so either Elgin's example of statistics is a poor choice or, more likely, she overlooks an essential element of stupidity – absence of reason. You are not stupid if you fail a statistical test, but might be if you do something, or make a decision, that is patently irrational.

For example, in the 2016 presidential election the citizens of Whitley County, Kentucky, voted overwhelmingly for Donald Trump. This was surprising because the number of Whitely citizens without medical insurance had declined dramatically under the Affordable Care Act ('Obamacare'), and because during the campaign Trump and the Republican Party said they would repeal this program. When asked why they voted for Trump, given that so many relied on Obamacare and they were well informed about Trump's intention, people said they 'simply felt' he couldn't repeal a law that had done so much good for them: 'We all need it … You can't get rid of it'; 'I guess I thought that … he would not take health insurance away, knowing it would affect so many people's lives.'[20] In other words, when people weighed two competing factors – voting in their own interests to retain something that is important to them, versus voting against their own interests in the vague hope that Trump would not do what he and his party clearly promised to do – they chose the latter.[21] This is stupidity. If in 2020 they again knowingly vote against their own interests, again in the irrational hope that a candidate will not do what he promises to do, stupidity will have evolved into folly.

Education: a safeguard from stupidity?

Can we safeguard society from stupidity? Surely a better-educated population would be less likely to commit acts of stupidity than a less-educated one. This is clearly not the case.

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[19] If 1,000 people are tested for the disease, there will be 50 – 5 percent – false positives and 1 correct positive result – 1 in 1,000 – so your chance of having the disease is 1 in 51, which is very slightly less than 2 percent. The example is from Stuart Sutherland, *Irrationality* (London: Penguin Books, 1994) 208. Sutherland appositely concludes: 'Clearly high intelligence does not protect against making gross errors.'

[20] Sarah Kliff, 'Why Obamacare enrolees voted for Trump', *Vox* (13 December 2016).

[21] Note that people often vote against their own interests, but they do so in favour of the greater good. This was clearly not the case for Whitley citizens.

For example, if we consider countries such as Australia, Britain and the United States, their respective citizenries are now vastly better educated than they were, say, at the close of World War II. However, nobody could pretend that public or political discourse have similarly improved over that period. To the contrary, there appears to be an inverse relationship between a society's general level of education and the quality of its public and political discourse.[22] We might accept that better education does not preclude stupidity, but it seems perverse, and rather deflating, to think that education might compound stupidity. However, as René ten Bos observes, it 'can be very stupid' for a society or organisation to strive for intelligence.[23] Ten Bos cites the age-old view that too much intelligence can hinder a person's capacity to make a decision. The intelligent person entertains genuine and realistic doubts, rejecting any simple binary division of the world – black and white, us and them, and so on – preferring to engage with the more complex and nuanced grey areas of existence. However, 'the price this person has to pay for his or her unmistakeable intelligence is practical paralysis: no knot will ever be cut easily'.[24] For organisations, too much intelligence can generate its own forms of stupidity. Ergo, an organisation's quest to raise the 'intellectual IQ' of its people might well backfire. Universities, for example, are full of highly intelligent people, yet they are usually administrative quagmires.[25] In short, the idea that stupidity will disappear through additional 'inputs' of rationality and intelligence might itself be stupid.

Indeed, the notion that we can safeguard society from stupidity assumes that stupidity can and should be overcome. To the contrary, ten Bos argues that some stupidity is vital if an organisation or society is to function properly. This is because wisdom and stupidity – 'wisdom's little stepbrother' – are entwined: some kinds of knowledge can be stupid.[26] For example, modern strategic warning systems have become more sophisticated and intelligent, but to what end? These systems are designed and developed to protect us from high-level

[22] Confirmation of this hypothesis is the famous series of debates between Abraham Lincoln and Stephen Douglas during the 1858 US senatorial campaign. At that time, only a tiny percentage of Americans possessed a university education, yet the quality of these debates was immeasurably superior to any presidential/political debate of the last four or more decades.

[23] René ten Bos, 'The Vitality of Stupidity', *Social Epistemology*, vol. 21, no. 2 (April-June 2007) 140.

[24] Ibid., 141.

[25] In my experience as a low-level university administrator, programs to increase the intellectual calibre of administrators – by hiring more-qualified staff – resulted in more-glutinous quagmires.

[26] ten Bos, 139, 145. Note that ten Bos tends to use 'intelligence' and 'wisdom' interchangeably.

threats. In practice, the more successful and investigatively powerful they are the better able they are able to draw attention to comparatively obscure and lower level dangers – or non-dangers such as Dr Haneef [27]– but in doing so they divert attention from real and pressing dangers such as climate change, pollution and domestic violence.[28] In other words, the increasing cleverness of these systems can produce increasingly irrelevant – or stupid – results. An unfortunate consequence of this situation is that, when simple and efficient solutions are enunciated to address a problem, they are often dismissed because they lack the complexity and sophistication we have (stupidly) come to regard as hallmarks of an effective solution.[29]

For example, probably the most effective way to reduce CO_2 emissions is through a carbon tax, and the simplest and least unpopular way of levying such a tax is by making it revenue-neutral, often referred to as a 'fee-and-dividend' system. The simple rationale behind it is that fossil fuels are taxed at a certain rate per tonne of CO_2-equivalent. The revenue collected is then distributed equitably to citizens and businesses.[30] Ergo, if you use less fuel than the average person or business you will be receive back more money than you paid in tax. British Columbia introduced a version of the tax-and-dividend scheme in 2008, the first comprehensive carbon tax in North America. The scheme has been a success, reducing the province's emissions, encouraging its transition to a low-carbon economy, and becoming increasingly popular as its carbon price rose.[31] A 2014 study showed that if a tax-and-dividend scheme were introduced in the United States, more jobs would be created than the baseline expectation, emissions would be substantially reduced, and there would be fewer

[27] Dr Mohamed Haneef was arrested at Brisbane Airport in 2007 and held for 12 days without charge. He was the innocent victim of a complex data collection system that assembled a few vaguely related facts into a non-existent terrorist connection.

[28] One might add that these systems had very mixed success in warning about Covid-19.

[29] With domestic violence, for example, only a few states in America – none in Australia – have legislated for mandatory reporting by *veterinarians* of actual and suspected animal abuse, despite the long-established link between animal abuse and domestic violence [Allie Phillips, *Understanding The Link between Violence to Animals and People* (Alexandria, VA: National District Attorneys Association, 2014)].

[30] Though adjustments are usually made for low-income earners and people in rural areas.

[31] See Brian Murray and Nicholas Rivers, 'British Columbia's revenue-neutral carbon tax: A review of the latest "grand experiment" in environmental policy', *Energy Policy*, vol. 86 (November 2015) 674-683.

premature deaths caused by air pollution.[32] The benefits from, and simplicity of, a tax-and-dividend scheme are clear, yet to date no other jurisdiction except Switzerland has adopted it. Instead, most prefer 'cap-and-trade' schemes of such eye-watering complexity and fiscal prestidigitation that they can operate 'successfully' within jurisdictions yet have nearly no effect on reducing aggregate global carbon emissions.[33]

What, then, about Trump supporters in Whitely County? Would a hefty dose of rationality and intelligence have helped them to vote more wisely? Probably not; we have already noted that attempts to augment rationality and intelligence might themselves be stupid. Moreover, the county's votes were largely based on intangible or cultural criteria – such as invoking an industrialised past to 'make America great again' – that are often immune from rational argument.[34] Ten Bos notes that stupidity has usually been understood as a lack – of knowledge, comprehension and so on – whereas it might sometimes be better understood as an excess – such as overthinking or unnecessary activity.[35] Whitely voters appear to be a good illustration of such excess: they would have made a wiser choice if they had thought less about extraneous matters and more about simple self-interest.

One point to emerge from this discussion is that stupidity usually prefers complexity. In and of itself complexity is not stupid, and over-simplifying complex situations can be stupid, but it is easier for stupidity to hide in a complex environment. Over-simplification is often easy to detect, but a stupid decision in a complex system can remain hidden until it has infected the whole. For example, during the Covid-19 pandemic a Victorian government official decided to use untrained, unskilled private security guards to monitor quarantine in Melbourne's hotels. It was a patently stupid decision with fatal consequences. A subsequent inquiry found that no-one, elected or appointed, in the government knew who made the

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[32] Scott Nystrom and Patrick Luckow, *The Economic, Climate, Fiscal, Power, and Demographic Impact of a National Fee-and-Dividend Carbon Tax* (Washington DC: REMI and Synapse, 2014).

[33] Australia introduced a hybrid tax-and-dividend scheme in 2012. Unfortunately, the additional complexity made the scheme both harder to sell and easier to target.

[34] It is interesting that philosophy which delves too deeply into the 'mysteries of the universe' and thereby becomes 'otherworldly' and 'impractical' is condemned by ten Bos as stupid. I think ten Bos is overstating the matter, but his point (which I accept) is that a high level of rationality can be compatible with a high level of stupidity [ten Bos, 139].

[35] ten Bos, 146.

decision. The Byzantine complexity of Victoria's health and security systems entailed that an unidentified person could make a stupid decision that was not detected until its consequences were beyond recovery. We are now on the cusp of folly.

Folly – three criteria

In *The March of Folly*, Barbara Tuchman investigates how apparently sane groups of people can make, and continue to make, patently stupid decisions. She provides three criteria necessary for a decision to be labelled as folly.[36] The first is that the decision was perceived as counter-productive at the time it was made. Governments make plenty of stupid decisions, but some of these can be seen as counter-productive only in hindsight; few people or none might have forecast that a given decision would produce results that counteracted the intent.[37] The second is that a feasible alternative must have been available – and, I would add, known to have been available – at the time a decision was made. A decision can hardly be called folly if there were no alternative, or if the alternatives were so onerous that most governments would not have been able to persuade their citizens that any of those alternatives was possible. The third criterion is that the decision was made by a group, and not be the lunacy of an irrational individual. The folly of mercurial dictators is not strictly relevant to this discussion because alternative views are rarely enunciated. On the other hand, even within a democracy a group may be so dominated by an individual, or a dogma, that decisions can be made, and repeated, with which few in that group would personally agree.

Tuchman provides some historically significant examples of folly, such as the war for American independence, but commonplace examples are no less illustrative. For instance, in 2016 the New South Wales government wanted money to spend on infrastructure projects, and so decided to raise funds by privatising the state's land titles registry. The government was amply warned for the following reasons that the registry should not be privatised: it was

[36] Barbara Tuchman, *The March of Folly: From Troy to Vietnam* (London: Abacus, Sphere Books, 1985) 4.

[37] A good example would be decisions made to address 'stagflation' in the 1970s, wherein economic stagnation and high unemployment were unexpectedly accompanied by high inflation. The situation was anomalous and its causes were largely unknown – they are still not well understood – so it is hardly surprising that governments made decisions which exacerbated the conditions they were intended to ameliorate.

a government-owned business that made a clear profit $130 million annually; similar decisions in Canada had led to tripling or even quadrupling of fees for registry services; and privatisation would jeopardise security of titles because the new owner/lessee would be more interested in profits than administrative precision.[38] As if to facilitate the last-mentioned reason, the government enacted staff redundancies in an attempt to make the registry more attractive to potential buyers. This loss of expertise coincided with the biggest error in the registry's history when it allowed more than 200 families to purchase properties that lay in the path of a future freeway.[39] The registry was eventually leased for 35 years, for which the government received $2.6 billion, a trivial amount given that the registry would earn more than $4.5 billion (not adjusted for inflation) over that period. As a former surveyor-general said, 'The government has had an attack of madness'.[40] Further, not all of the money raised was to be spent on essential, and non-controversial, infrastructure like hospitals and schools. More than $1 billion was allocated for upgrading three sports stadiums, thereby ensuring even less public sympathy for the scheme. By what other means might the government have raised the money to fund its projects? It could simply have borrowed the money or issued bonds. In either case the interest on $2.6 billion would be much less than the profit earned by the registry. The entire episode is a paradigm of folly.

Other characteristics of folly

In addition to the three primary criteria, there are several other important, and related, characteristics of folly.[41] Not all of them are present in all acts of folly. The first is continuous over-reaction to various situations. As I write, Australia's government has been over-reacting to matters of perceived border security for about two decades. This policy was probably intended as a vote-winner, but it has subsequently degenerated into folly. The problems with over-reaction include irrational allocation of resources. In Australia, border security is extravagantly funded, even though breaches of it pose very little danger to the public, whereas projects to mitigate climate change are allocated paltry amounts. More

[38] 'Experts say NSW land titles registry sell-off a disaster', *Government News* (24 February 2017).

[39] Esther Han, 'NSW Government's F6 property bungle caused by haste to privatise Land and Property Information Unit, say former staff', *Sydney Morning Herald* (3 November 2016).

[40] Esther Han, 'NSW Government refuses to debate the land titles registry sale and the F6 property bungle' *Sydney Morning Herald* (14 November 2016).

[41] Tuchman, 470-473.

importantly, over-reaction rapidly increases and expands under its own momentum. 'Border security' soon encompasses issues that have little or nothing to do with borders or security, but the label provides governments with a handy and expanding range of matters with which to accuse opposition parties and critics of being 'weak' on protecting the country. Momentum is maintained by an avalanche of exaggeration and cliché. 'Better safe than sorry' is commandeered as a policy position for border security, but not for climate change.

Another characteristic is the absence of reflective thought on what we are doing and whether we are achieving what we want to achieve. For example, during the global financial crisis America's biggest car manufacturers – General Motors, Ford and Chrysler – wanted public money to prop up their ailing companies. Their CEOs went to Washington to plead their case, but each flew there in his company's private jet.[42] It simply never occurred to these men, nor to their senior management, that appealing for taxpayer funds from the seat of a corporate jet would undermine their mission and credibility.

There is also what Tuchman calls 'wooden-headedness' – the inability to acknowledge, let alone accept, facts that plainly contradict one's position. Some of the most egregious examples occurred during World War I. The Third Battle of Ypres – better known as Passchendaele – began on 31 July 1917. In preparing for this offensive, Field Marshall Douglas Haig and his staff ignored political advice, military intelligence warning that the enemy expected an offensive, meteorological forecasts of heavy rain, and warnings that a preliminary artillery bombardment would both alert the Germans to an impending attack and destroy the area's complex drainage system.[43] Haig ordered the offensive to proceed, but it was immediately bogged in a sea of mud. By early November, British and Dominion casualties were over 300,000 – Germany lost about a third fewer – and all that had been achieved was a small salient jutting awkwardly into enemy territory. When the German army launched its spring offensive in 1918, the British abandoned this salient and withdrew to a

[42] 'Big Three CEOs Flew Private Jets to Plead for Public Funds', ABC News (19 November 2008).

[43] Norman F. Dixon, *On the Psychology of Military Incompetence* (London: Jonathan Cape, 1976) 372-373.

more defensible position – behind the line from which Third Ypres began. Haig's battle had achieved less than nothing.[44]

Wooden-headedness is a significant problem for most governments. Once a government has made a decision about a contentious matter, it will often defend its position even in the face of irrefutable evidence that this decision was wrong, and even though by maintaining its position the government is knowingly acting against its own and its citizens' best interests. For some governments, fear of 'losing face', of having to admit it was wrong, holds more sway than the desire to act reasonably and responsibly. As rational parliamentary debate continues to decline, and as opinion dominates fact in what remains, manifestations of wooden-headedness are likely to increase.[45]

Illusion of omnipotence

Perhaps the most critical of these additional characteristics of folly is the illusion of omnipotence. A good example was the illusion of national potency and invulnerably fostered by America's successes in World War II and Korea. This mirage was exposed when America intervened in Vietnam, where conflicts and problems were not amenable to solution by overwhelming force or strategies that had hitherto been successful. There are at least two reasons that make the illusion of omnipotence especially dangerous. The first is that it inverts the normal logical progression from question to answer. Instead of examining a situation and asking how we might fix it, omnipotence provides us with a convenient collection of answers to which we then search for suitable questions. If a country possesses overwhelming military power, its response to a novel situation is more likely to be with questions of how much power to apply to that situation rather than a genuine attempt to understand it and then do something appropriate.

The second reason is an offshoot of the first: if a country's past success has been based on technological superiority then it is more likely to tackle novel situations with a technological 'fix' rather than a more appropriate response. To consider Vietnam again, both

[44] For a brief account see A. J. P. Taylor, *The First World War* (London: Hamish Hamilton, 1963) 146-148.

[45] In my experience of parliaments, fear of being accused of committing a policy 'back-flip' or 'about face' is one of the most debilitating constraints on good governance.

Barbara Tuchman[46] and Ronald Aronson[47] provide insightful analyses of America's involvement, but neither mentions its infatuation with technological fixes. This infatuation reached its peak during the Vietnam War (1965-1973), intensified by the acme of successful technology – America's Apollo space program. In 1969, just eight years after President Kennedy issued his challenge about landing a man on the moon, American technology achieved what many (including many in the space industry) had thought impossible. The message was hard to resist: if American know-how could conquer the moon, then subduing an apparently insignificant country like North Vietnam presented little challenge.

Besides military failure, this Apollo-powered illusion spawned two critical misapprehensions. Firstly, all sectors of US technology bathed in reflected lunar glory, thereby diverting attention from the reality that many American industries, such as automobile manufacturing, were technologically obsolete. The second was that the program's success masked its limitations. By definition the program's goal was other worldly; its application to terrestrial matters was very limited. Though the program was often justified by claiming it invented or fostered many spin-off technologies, such as freeze-dried food, these claims are usually overstated[48] and they miss a vital point: if an Apollo program's worth of brain power and money were directed towards socially useful technologies then the number of spin-off inventions, and concomitant benefits to society, would have been vastly more.[49] In short, America's technological success was a harbinger not of prosperity but rather of its increasing incapacity to analyse and adapt to changing circumstances, including climate change.

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[46] Tuchman, 290-474.

[47] Ronald Aronson, *The Dialectics of Disaster* (London: Verso, 1983) 137-187.

[48] For example, freeze-drying was used in World War II. This technique was adapted to and popularized by the Apollo program.

[49] The Lucas Plan of the mid-1970s is a notable example. The plan was formulated by employees of Lucas Aerospace, a weapons producer, in anticipation of cuts to Britain's defence budget. The idea was to preserve jobs by using the company's technical expertise to develop socially useful products. Employees put forward ideas for 150 products in categories such as medical equipment, energy conservation and robotics. The plan was rejected by Lucas management. The company no longer exists [Brian Salisbury and Phil Asquith, 'The Lucas Plan, Then And Now', *Morning Star* (22 November 2016)].

Ignorance and epistemic safeguards

When governments or organisations commit acts of folly, often our first reaction is to blame wilful ignorance. We think that if governments or organisations cared to know more about the issue at hand they would be less likely to pursue folly. It is not folly to act in ignorance when few people or none possess requisite knowledge, but wilfully ignoring information – wooden-headedness – may be a portent of folly. Governments that ignore evidence about global heating are prime candidates for folly, and prime targets for accusations of wilful ignorance, but folly can thrive just as luxuriantly when perpetrators are well informed. Indeed, some of the most egregious acts of folly have been committed by groups that were not only well informed but had even taken effective action to ensure they were. Barbara Tuchman's observations on America's war in Vietnam are particularly apposite:

> All the conditions and reasons precluding a successful outcome were recognized or foreseen … during the thirty years of our involvement. … At no time were policy-makers unaware of the hazards, obstacles and negative developments.[50]

Moreover, America kept itself informed: Washington always possessed adequate intelligence, and supplemented it with special investigative missions. There was also extensive independent reportage and commentary.[51] America's Vietnam folly was pursued, not in ignorance or in secret, but openly and with sufficient information and accumulating evidence that what it wished to achieve was both unattainable and self-destructive.

It seems there is no epistemic safeguard against folly, no level of knowledge that will afford immunity from it. Therefore, it is worth asking: in addition to what is already known about an issue, what extra fact would have to be known by a government or authority that would save it from folly? With regard to global heating, what additional fact would a government require, on top of what it already knows, that would motivate it to act? To put

[50] Tuchman, 290.

[51] The best-known example was Walter Cronkite's prime-time television report in February 1968, in which he stated that the war was 'mired in stalemate'. Cronkite was widely held to be the most trusted media voice in the country; he had gone to Vietnam to investigate what was happening. Despite Cronkite's status, and his misgivings, America prosecuted its war for another six years.

this another way, would a government be able to specify something it does not currently know – for example, the precise global temperature at which New York will be submerged – such that remedying this ignorance would provoke it to action? There are no such facts or epistemic remedies because governments already possess more than adequate information to address climate change. Additional evidence, while welcome and necessary for directing policies and so on, is very unlikely to be an epistemic 'tipping point' for any government that has not already acted on existing information.

Nothing new under the sun

Folly is so pernicious and ubiquitous that it is not surprising to find it has a long history, and even scriptural warrant. Tuchman comments on two ancient episodes: the fall of Troy, and the division of Israel after Solomon's death. Both have canonical status within our cultural heritage; however, Tuchman overlooks several points of significance.

The demise of Troy through Greek subterfuge is well known. Once the Greek's wooden horse had been brought inside the city, the Trojans then debated what to do with it, and 'three policies recommended themselves'.[52] Two were to destroy the horse; the third was to let it stand as a dedication to the gods. The third was chosen because 'the city was destined to be destroyed'. Tuchman states that we might demythologise this as humankind being 'addicted to pursuing policy contrary to self-interest'.[53] There is, however, more to it. The politico-symbolic significance of the wooden horse is that the Trojans dragged inside their city the source of their own destruction. Homer is careful to specify that the Trojans had three choices, whereas he could have presented his narrative as a dramatic either/or decision. Trojans had two out of three chances of saving themselves, even if they drew lots, but still made the wrong choice. So stupid an error of judgment must have been divinely ordained, the decision of gods rather than people.

If we allow that the *Odyssey* was composed in the 700s BCE, the unusual cause of Troy's downfall exercised ancient minds for centuries. In the 100s CE, for example, the Greek travel writer Pausanias asserted that 'anyone who does not suppose that the Phrygians [Trojans] are utterly stupid' would realise that the horse was 'an engineer's device for

[52] Homer, *Odyssey*, 8.500-515.

[53] Tuchman, 48.

breaking down the wall'.[54] The extraordinarily well-travelled Pausanias thought it more likely that the legend was garbled than that a famous city could be destroyed by its own folly.

Folly and Greek tragedy

Indeed, folly was incomprehensible to the degree that Greek tragedies tended to conflate it with divine fate. As an example, it is worth considering Aeschylus' *Persae* (*The Persians*), the only surviving Greek tragedy based on a contemporary event – the defeat of Xerxes' Persian navy at Salamis in 480 and his army at Plataea in 479.[55] Except for *Prometheus*, there is a common motif in Aeschylus' plays: human suffering has its ultimate origin in a foolish or evil act.[56] In the *Persae* it is Xerxes' reckless decision to attempt the conquest of Greece. Was this decision fated to be made or was it merely foolish? Aeschylus has it both ways. On the one hand, no mortal can avoid the 'deceitful deception of god'; 'benign and coaxing at first', it leads people into snares from which there is no escape [107-114]. Xerxes' mother inveighs against the 'hateful deity' who deceived the Persians [472], and the ghost of his father (Darius) laments that 'a great divinity' duped his son's reasoning [725]. On the other hand, though Darius acknowledges that Zeus would eventually bring calamity to Xerxes, 'when a man hastens to his own undoing, the god joins in' [742]. In his ignorance and youthful recklessness, Xerxes thought to chain the 'sacred waters of Hellespont' [746] by building a causeway of boats across it, an ambition indicative of a diseased mind. Xerxes' mother then asserts that wicked men had misled her son by preying on his insecurity as the feckless son of a successful father [750-760]. Darius adds that Greece itself is the Greeks' greatest ally, because it starves to death any large enemy force that trespasses upon it [790-794].

Aeschylus has explored the heart of the matter. We (the audience) already know the outcome: Persia's forces were destroyed. Xerxes' decision was so foolish as to appear the result of divine initiative, yet the gods did not absolve him from the consequences of his decision. There might have been a doom on Xerxes, but the causes of his folly – his own hubris, and allowing himself to be goaded by corrupt counsellors – were entirely mundane.

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[54] Pausanias, *Guide to Greece*, 1.23.10.

[55] *Persae* was first produced in 472, so survivors of both battles were among the audience.

[56] For a summary see Alan Sommerstein's 'Aeschylus' in the OCD. For a fuller account see H. D. F Kitto, *Greek Tragedy*, 3rd ed. (London: Methuen, 1961) 31-116.

Moreover, the consequences of folly do not only destroy the fool; they also bring disaster to his descendants and to the broader community. There is a further point, one with modern echoes: it is folly to think you can bend the natural world to your will. The Hellespont was not a slave such that Xerxes could chain it to facilitate his plan [743-750], and the mainland of Greece could itself become a foe. Two and a half millennia ago, Aeschylus condemned arrogance towards the natural world as a harbinger of disaster.

Biblical folly

With regard to a narrative in *1 Kings* about the division of Solomon's kingdom, Tuchman misses the substance of this episode. The narrative describes events set in the late 900s BCE. Tuchman regards this account as historical, but this is improbable given that the documents we know as *1* and *2 Kings* were not written, or at least finally redacted, until the 500s BCE. It is much more likely, as Mario Liverani argues, that:

> This story serves to link the presumed Davidic-Solomonic 'United Kingdom' to the later reality of the permanent separation of two centres of political power in Jerusalem and Shechem.[57]

The narrative's writers probably possessed the following: several inchoate sagas about the legendary kingdoms of David and Solomon;[58] traditions of varying reliability, possibly documented with royal annals, about the kingdoms of Israel and Judah; and fairly reliable traditions about the destruction of both kingdoms. The narrators' task was to explain how a once mighty kingdom had degenerated into two insignificant and, by then, defunct kingdoms. The writers could have selected from a variety of 'god-sized' causes, such as natural disaster, conquest by a powerful neighbour raised up for the purpose, or divine intervention.[59] Instead, they attributed this seminal event in the region's history to an act of puerile folly.

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[57] Mario Liverani, *Israel's History and the History of Israel*, Chiara Peri and Philip R. Davies trans. (London: Equinox, 2005) 104.

[58] 'Legendary' kingdoms as opposed to historical. For example, there is no archaeological evidence for Jerusalem having been a sizeable city, let alone the capital of an empire, during the supposed Davidic-Solomonic period [Israel Finkelstein and Neil Asher Silberman, *David and Solomon* (New York: Free Press, 2006)].

[59] Such as *Exodus* 10.20: 'Yahweh hardened Pharaoh's heart'.

The narrative relates how Solomon's son and successor, Reheboam, responded to requests from the kingdom's northern tribes for some relief from corvée labour. The king consulted his older advisors, men who had served Solomon. They counselled Reheboam to respond generously. He disregarded their advice, and instead sought advice from the friends he had grown up with and who now attended him – an archetypal and stylised old-young opposition.[60] The youthful hot-heads appealed to Reheboam's vacuous masculinity,[61] counselling him to oppress the northern tribes even more than his father had. Predictably, the northern tribes rejected Reheboam's threat and seceded from the south. Then, to add folly to stupidity, Reheboam sent Adoram, the man in charge of Solomon's forced labour and doubtless the most reviled person in the kingdom, to bring the northern tribes into line. Very predictably, they stoned Adoram to death.

The significance and message of this narrative have been overlooked by commentators. We might have expected a dramatic and powerful narrative to explain this epochal event. Instead, we get bathos, a ludicrous descent from Solomonic wisdom and glory to a fool surrounded by his crude confrères. We also receive a brief lesson in political power. Leaders often make stupid mistakes, but it is folly to antagonise opponents and make threats while not possessing the power to enforce them. The situation needed delicate handling, magnanimity and an authoritative (as opposed to authoritarian) decision. Reheboam was immersed in a situation that required qualities he so patently lacked. The narrators' message is clear and sobering: events of enduring historical, social and political strife can be caused by a single episode of folly. This message was not lost on succeeding generations. In the early 100s BCE, Yeshua Ben Sira wrote that Solomon was succeeded by 'the stupidest member of the nation, brainless Reheboam, who drove the people to rebel'.[62]

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[60] For a brief account see Walter Dietrich, '1 and 2 Kings' in *The Oxford Bible Commentary,* John Barton and John Muddiman eds (Oxford: Oxford University Press, 2001) 241.

[61] *1 Kings* 12.10: 'My little finger is thicker than my father's loins' – 'loins' being a euphemism for phallus.

[62] *Wisdom of Ben Sira* (also known as *Sirach* or *Ecclesiasticus*) 47.23. It is interesting to note that perhaps the most lauded king in the Old Testament, Josiah of Judah (639-609 BCE), was killed when he recklessly confronted an Egyptian army near Megiddo (*2 Kings* 23.29). Disregard of the vast disparity in military strength between Judah and Egypt might qualify as folly, a point Ben Sira quietly overlooks in his praise of Josiah (49.1-3).

The significance of these accounts is confronting: unless we recognise the active malignancy of folly then we are disregarding its rich cultural trajectory and not taking it seriously enough.

China's deadly folly – famine

The above examples are from the west's Greek and Hebrew inheritance, but folly's manifestations in other traditions are no less instructive. The Chinese famine of 1958 to 1962, for example, was not only one of history's deadliest episodes of folly; some of its characteristics also illuminate the debate about climate change. The origins of this disaster lie partly in China's appropriation of Soviet pseudo-science, particularly the biological theories of Trofim Lysenko, who ruled Soviet agricultural science from the late 1930s to the early 1960s. The reasons for Lysenko's dominance are instructive. Having seized power, Stalin resolved that he and the party would decide which scientific theories were correct. As it happened, the discipline most vulnerable to party interference was biology. As Vadim Birstein speculates, this was probably because biology appeared to require fewer specialised skills than physics and chemistry, and therefore seemed more 'accessible' to party members.[63] This proved to be a fatal misapprehension. Though Stalin had no training in biology, he participated in 'discussions' with experts on genetics and evolution. It is noteworthy that similar discussions on physics and chemistry were abandoned because those disciplines were perceived as vital for military purposes.

Lysenko's theories were popular with the party because he dismissed Mendelian genetics as a bourgeois construction, replacing it with his own concoction of 'creative Darwinism' in which there is no intraspecies competition and where one species can transform itself into another.[64] Implementation of Lysenko's theories, and those of his associates, transformed an agriculturally productive country into one hamstrung by permanent food shortages. Notwithstanding, the Soviet press continued to praise Lysenko's 'successes'.

Lysenko's ideas were a perfect fit for Mao Zedong's views on the class struggle: plants from the same 'class' would not compete against each other, so seeds should be planted close

[63] Vadim J. Birstein, *The Perversion of Knowledge* (Cambridge, MA: Westview Press, 2001) 45. Birstein was a Russian geneticist (now living in America) who began his training while Lysenko was still in power.
[64] Birstein, 48.

together because they will help each other.[65] In 1958, as part of the Great Leap Forward, Mao drafted a blueprint for Chinese agriculture. Its eight points, all inspired by Lysenkoism, included new plant breeds, close planting, deep ploughing and pest control. The astonishing results – all fantasy – were trumpeted in China's press. Varieties such as sunflower and artichoke were crossbred to produce hybrids that combined characteristics of both. A cotton plant was crossed with a tomato plant to produce red cotton. Super-sized vegetables were produced, as were staggering rice yields. Guizhou province took deep ploughing to extremes and claimed the biggest yield – 65 tonnes of rice harvested from just 0.17 acres.[66] These results were nonsense, but they were congruent with, and expressions of, party belief. Government officials vied with each other to inflate production figures. In this pipedream, China had so much surplus food there was debate over what to do with it. People were encouraged to consume as much as they could; grain exports doubled from 1959-61 while food imports were reduced. In reality, local granaries were emptying by the winter of 1958-59; by the spring of 1959 millions were starving.

Further, one of Mao's eight points – pest control – exacerbated an already catastrophic situation. Officials decided that sparrows were responsible for eating grain, and therefore began an eradication campaign in 1958. By the time it ceased in April 1961, insects had proliferated in the absence of predating sparrows, and grain yields fell further.[67] Reality rarely obtruded. When Mao heard about food shortages, he concluded that people were lying or exaggerating and that peasants were hiding food. By the time the Great Leap Forward exhausted itself, about 30 million people had starved to death.[68]

Even though mainstream American and European press carried accurate accounts of the famine, these reports were denied or ridiculed by high-profile people such as Felix Greene (prominent British journalist and brother of novelist Graham Greene), Edgar Snow (American journalist and China expert), Sir Cyril Hinshelwood (President of the Royal Society), Lord Boyd Orr (Nobel Laureate and first director-general of the UN's Food and Agriculture Organisation) and François Mitterrand (a senior politician when he visited China

[65] Jasper Becker, *hungry ghosts: China's secret famine* (London: John Murray, 1996) 68-69.

[66] Ibid., 73.

[67] Ibid., 76-77.

[68] Ibid., 270.

in 1961; president of France from 1981-95). Mitterrand's report was slavishly unequivocal: Mao was telling the truth when he said, 'I repeat in order to be clearly understood: there is no famine in China'.[69] Further, as Simon Leys observed, sinologists throughout the world refused to accept the famine existed, preferring to believe their own dogma about Mao's China.[70]

There are important lessons for climate change from China's famine and Russian biology. First, nonsense can usurp proper science. Loren Graham maintains that, in the Soviet Union, Lysenkoism was replaced because it was undermined by contradictory and more convincing scientific evidence. Moreover, this replacement of Lysenkoism by western genetics 'was a disruptive discontinuity that violated Soviet ideological principles that had been developed over a period of several decades and was therefore resisted by the political establishment'.[71] Graham's scenario is somewhat comforting: the weaker scientific theory is replaced by the stronger, despite political opposition. It is also wrong, because Russian scientists possessed a world-class understanding of genetics and evolution *before* Lysenko's rise to power in the mid-1930s.[72] The question that Graham fails to address is why a sound and thriving science was replaced by a pseudo-science that came close to undermining the state's viability, and why this pseudo-science was encouraged to flourish when evidence of its bankruptcy was abundantly available. The worrying lesson of Lysenkoism is that states are willing to pursue ideas and practices that are manifestly contrary to their own best interests, simply because those ideas and practices are held to be compatible with prevailing dogma.

Further, Lysenkoism thrived in its self-created milieu of 'two sciences': Lysenko's biology was a product of proletarian science, while the classic theory of heredity – as enunciated by Gregor Mendel, Wilhelm Johannsen, Thomas Hunt Morgan and others – was a product of bourgeois science. The importance of the two-sciences thesis had nothing to do with scientific application. Rather, it was an exaggerated genetic fallacy (no pun intended) whereby it was held that the alleged political character of science fundamentally shaped the

[69] Ibid., 293.

[70] Simon Leys, *The Hall of Uselessness* (Collingwood, Vic.: Black Inc., 2011) 351-354.

[71] Loren R. Graham, *What Have We Learned About Science and Technology from the Russian Experience?* (Stanford: Stanford University Press, 1998) 22-23.

[72] Birstein, 46.

content of a scientific theory. In short, the content of bourgeois science inescapably expressed its bourgeois origin. This had some important ramifications. First, Lysenkoism's downfall owed a good deal to its own political success. Bourgeois genetics served as a convenient scapegoat for the poor state of Soviet agriculture. However, the more successful Lysenko was in eliminating bourgeois biology, the less blame it could attract for the failures of proletarian science. Second, the two-sciences thesis supplied a ready answer to the question that Lysenko and his minions were thereby able to avoid asking: why were classic geneticists so deluded and misled?[73] Without the convenient and dismissive riposte of 'bourgeois science', an actual investigation into genetics would quickly have revealed that its practitioners were not deluded after all.

'Two sciences' of global heating

The two-sciences thesis has some disturbing parallels with the science of global heating. First, climate science is stereotyped as the ideology of inner-urban middle classes – bourgeois science – while sceptics are stereotyped as outlying/rural-dwelling workers – proletarian science.[74] Again, perceptions are not informed by science but by the genetic fallacy that your views necessarily reflect the social cohort to which you are alleged to belong. Second, denial of global heating, though often effective, has been nowhere near as politically successful as Lysenkoism; it is unlikely to be undermined by its own success. Indeed, denial thrives on sniping from the margins of debate, its scientific poverty masked by presenting a small target of distorted and decontextualized facts. Only if it were to banish mainstream climate science to the periphery would denial's vacuity become patent. We have, therefore, the anomalous situation in which denial is strong enough to exert considerable influence on government policy, while being marginal enough not to be scapegoated for climatic malaise.

A related point is that a leader or government may use ideology to divide people into imaginary interest groups whose main purpose is to diminish each group's capacity to discern

[73] For a brief but penetrating account see Jean Curthoys, *Feminist Amnesia* (London: Routledge, 1997) 61-67.

[74] These stereotypes are convenient fictions used by politicians to control dialogue. For example, the fact that a large percentage of farmers are convinced about global heating is usually overlooked in this handy bifurcation. Nonetheless, many of these farmers vote for parties which deny global heating, an anomaly that entrenches the division.

its actual interests. For example, rural areas will, for the most part, be more affected by climate change than urban areas, so rural people should be more invested in addressing global heating than urbanites. However, 'wealthy urban elites' are accused of being able to afford to worry about global heating, while 'rural strugglers' are patronised as being unable to afford the luxury of worrying about something that will not pay the bills. Each group is energised by demonising the other, and validates itself by doing so – a handy ruse that deflects from government some of the odium it deserves for failing to do anything.

A second point is that states are poorly equipped to assess the implications of scientific theories, let alone adjudicate between competing theories. The disasters of Soviet agriculture are a prime example. States have not evolved to respond promptly or appropriately to scientific evidence.[75] Rather, and not unreasonably, their role is to balance or decide between competing priorities. However, when scientific evidence is such that it must override competing priorities if it is to receive an adequate response – as it does with climate change – the state is usually ill-equipped to act. Further, political leaders often perceive climate change as an 'accessible' area of science about which they can make pronouncements. Several recent prime ministers of Australia, and two presidents of the United States, have declared that global heating either does not exist or is not worth worrying about, whereas these men would never think of pontificating about a less complex area of science – that is, one with fewer variables – such as metallurgy.

Thirdly, if states realise their activities are harmful then they are just as likely to pursue a course of action that exacerbates, rather than ameliorates, the situation. America's war in Vietnam is a tragic example. The reason for this apparent obtuseness is that pursuit of ameliorative action would be tantamount to admission of error, whereas states are usually more willing to pursue error than admit it.[76] Moreover, if a state conventionally acts in

[75] This is not to say they are unable to do so. America's Manhattan Project (1942-46) to develop nuclear weapons is a clear example of the state actively harnessing, indeed driving, scientific discovery. Further, some countries responded quickly and decisively to the Covid-19 pandemic, clear evidence that states are able to act swiftly on scientific advice where their governments perceive they have the electorate's support to address a present or imminent threat.

[76] For example, as Willy Lam (Hong Kong University) states, the Chinese Communist Party never admits making mistakes because it propagates the fiction that its judgements and achievements are always 'great,

accordance with a given dogma then it is unlikely to choose a corrective course of action which contravenes that dogma.

Holding folly to account

A fourth lesson is that those who commit acts of folly are rarely held accountable; indeed, they are as likely to be rewarded as penalised. Further, those who criticise folly or strive to tackle it are more likely to find themselves ostracised than praised. Mao stayed in power until his death in 1976. On the other hand, Peng Dehuai, minister of defence and one of China's ten honoured marshals from the Korean War, saw what was unfolding and criticised the Great Leap Forward. He was dismissed from his position, imprisoned in 1966, and persecuted until his death in 1973. The case of Zeng Xisheng is even more poignant. Under his misrule a quarter of Anhui province perished – some 8 million people – even though state granaries in Anhui were full. For reasons which are not clear, Zeng performed a *volte-face* in 1961. He was dismissed in 1962, and executed five years later, not for causing mass death but for implementing reforms that were saving lives.[77]

At a much less (immediately) fatal level, leading climatologist James Hansen failed to receive funding for his research on CO_2 following his testimony about climate change to a congressional hearing in 1982. As Nathaniel Rich notes, it appeared as if Hansen were being punished for honestly reporting the findings of his research.[78] In 2019, Maria Caffrey lost her job in the National Park Service after she refused to delete references to human causes of global heating in her report about the effects of rising sea levels on coastal national parks.[79] In Australia, reward for folly has evolved into a pathological meme. The 2019 federal 'climate change' election was won by a man well known for supporting coal to the extent of bringing a lump of it into parliament in 2017. In the same election, the member for New England (Barnaby Joyce), widely and rightly criticised for his incompetence and hypocritical conduct, was comfortably re-elected. A post-election investigation showed that the more he

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brilliant and huge'. Quoted in 'Why searching for the truth about Tiananmen is more important than ever', Kirsty Needham, *Sydney Morning Herald* (31 May 2019).

[77] Becker, 87-92, 143-149.

[78] Rich, ch. 8.

[79] Maria Caffrey, 'I'm a scientist. Under Trump I lost my job for refusing to hide climate crisis facts', *The Guardian* (25 July 2019).

was criticised from outside his electorate, the more support he received within it. Even though Joyce had mismanaged matters that directly affected his electorate – drought policy, water policy and cuts to Landcare – and had catastrophic consequences in Australia's largest river system, he was rewarded. As one unsuccessful candidate lamented, 'Voters have mathematically rewarded Joyce for his conduct over the last two years, so it doesn't follow logic'.[80]

An important corollary of accountability failure is cynicism. If folly goes unpunished, let alone rewarded, then few in authority will act in accordance with common decency and truth. The inevitable result is cynicism, both within and beyond government. It signifies a crippling rupture between reality and ideology. At its most basic, cynicism feeds off the familiar sight of a politician rehearsing the 'party line' when we know she or he does not hold that view. Vastly more insidious is a government in which its leaders, or its slavish adherence to dogma, have created a milieu in which members operate successfully only by concealing their beliefs and judgments. This degenerates into the wretched spectacle of a government that no longer believes in what it is doing, a citizenry that knows this, and a tacit collusion between the two. As Elizabeth Farrelly rightly observes, 'we not only accept that truth has nothing to do with it. We pretty much demand to be lied to.'[81]

The final, and probably most important, lesson is that if – as we have noted – states are capable of knowingly acting against their own interests then there is little likelihood those countries will act in the interests of others. After all, a state uninterested in looking after its own people (or most of them) is not going to exert much effort to look after those beyond its borders. A corollary of this lesson is that countries which look after their own people will also be more likely to act in the broader global interest. It is not surprising to find, therefore, that countries with the happiest citizens – predominately, though not invariably, countries

[80] Gabrielle Chan, '"He's a maverick": why New England kept the faith with Barnaby Joyce', *The Guardian*, Australian ed. (15 June 2019). Joyce received 2.5 percent more first preference votes than he did in the 2016 federal election.

[81] Elizabeth Farrelly, 'Election heartbreak: voters begged to be duped', *Sydney Morning Herald* (25 May 2019).

with high levels of social support[82] – are also among the most active in addressing climate change. Further, the happier people are the more likely they are to be politically engaged.[83] Again it is unsurprising to discover that citizens in these countries exercise high levels of political engagement and thereby have more influence on government policy.

Folly or madness?

After the above litany of folly, one could be forgiven for thinking these were acts of sheer madness, and that our current tardiness in addressing climate change is likewise mad. The label might be convenient, but is misleading. When an act explores the frontiers of evil or folly, labelling it as madness can be consoling. For example, if we label the Nazi genocide of Jews as 'madness' then we can take some comfort in the view that it was committed by slavering psychopaths, crazy people with whom we have nothing in common and cannot understand. This is wrong. In fact, one of the most confronting characteristics of the Holocaust was the systemic rationality with which it was executed. For instance, the main conference to plan 'the final solution of the Jewish question' was held at Wannsee, Berlin, in January 1942. There were 14 participants, all high-ranking Nazi officials, seven of whom possessed doctorates. The minutes – written in detached, bureaucratic language – reveal a highly organised and well-researched plan, with some consideration given to questions such as what to do with Jews who worked in essential war industries.[84] Given that characteristics of madness include unclear goals, inability to imagine or weigh consequences, and organisational chaos, it is clear that the Holocaust was certainly not a program of madness. On the other hand, Nazi 'rationality' did not preclude folly: the flight of scientists from government-sanctioned antisemitism was a crippling loss to German science and industry and a windfall gain for the countries to which they fled.[85]

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[82] The top five (in order) are Finland, Denmark, Norway, Iceland and the Netherlands [*World Happiness Report 2019*, John F. Helliwell, Richard Layard and Jeffrey D. Sachs eds (New York: Sustainable Development Solutions Network, 2019) 24].

[83] George Ward, 'Happiness and Voting Behaviour', ibid., chapter 3.

[84] The minutes, written by Adolf Eichmann, are in Lucy S. Dawidowicz, *A Holocaust Reader* (West Orange, NJ: Behrman House, 1976) 73-82.

[85] For example, nearly half of Germany's theoretical physicists fled [John Cornwell, *Hitler's Scientists* (London: Penguin, 2004) 139-141].

A further misleading view is that acts of madness emanate only from mad, dysfunctional or crisis-ridden societies. The problem with this view is that comparatively normal and sane societies seem no more immune from acts of madness than dysfunctional societies. As Ronald Aronson notes about America's involvement in Vietnam, this 'madness … issued not from a society in crisis, but from a smoothly functioning society at the peak of its wealth and power'.[86] For Aronson, madness is not a matter of psychology but of policy. He observes that people involved in formulating government policy often invoke the concept of madness – 'demented' and 'deranged' are also used – in the casual language of moral or political judgment, but not when they talk about serious policy analysis. The reason is that high-level policy-makers usually possess high-level political and strategic awareness, and above average levels of intelligence and sensitivity – that is, they are not mad – but these qualities do not prevent them from enacting policies for which 'madness' seems the only apt description. In Vietnam, America's presence was so patently violent and self-defeating that deeming it to be 'a systemic rupture with reality is unavoidable'.[87] Perhaps it is this rupture that not only makes us view some government policies as mad but also makes us feel we are being drawn into their madness. After all, if a government's policy is defiantly non-rational then continually pointing out its lack of coherence with reality is a probable path to absurdity.

Conclusion – the merry-go-round of folly

After surveying the political paralysis surrounding climate change, Elizabeth Kolbert wrote:

> It may seem impossible to imagine that a technologically advanced society could choose, in essence, to destroy itself, but that is what we're now in the process of doing.[88]

On the contrary, having rehearsed the above litany of folly, little imagination is required. It is manifestly clear that states and societies can knowingly act against their own interests, even to the point of ruin. When Kolbert issued a second edition of *Field Notes* in 2015, she

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[86] Aronson, 169.

[87] Ibid., 178.

[88] Elizabeth Kolbert, *Field Notes from a Catastrophe: Man, Nature, and Climate Change*, 2nd ed. (New York: Bloomsbury, 2015 – 1st ed. 2006) 189.

observed that Barack Obama, unlike George W. Bush, appointed prominent scientists to positions of environmental significance and promised to act on climate change. She added, however, that his record on climate change was mixed at best.[89] Surely this is because, though President Obama endeavoured to address global heating, he was frustrated at every environmental turn by a recalcitrant Congress. However, this view is at odds with what he said in November 2018 at Rice University in Houston:

> I know we're an oil country and we need American energy. By the way, American energy production, you wouldn't always know it, but it went up every year I was president. Suddenly America's the biggest oil producer and the biggest gas [producer]. That was me, people. [applause][90]

This statement, from a leader whom we credit with intelligence and integrity – certainly compared to presidents Bush and Trump – confirms Kolbert's anxiety about our self-destruction, and prompts several corollary questions. Are we willing to prevent environmental catastrophe caused by climate change? If we are, how or where do we begin to act? And even if we can answer those questions, how do we get off the merry-go-round of folly?

[89] Ibid, 206.

[90] Posted on *Real Clear Politics* (28 November 2018) – my transcript.

We all know the difficulty of carrying out a resolve when we secretly long that it may turn out to be unnecessary. In such states of mind the most incredulous person has a private leaning towards miracle.[1]

Chapter 4
Risk

Overview

Prima facie, one of the most effective ways to avoid folly is to undertake a thorough assessment of risks involved. This should result in a correlation between risk and response. If global heating constitutes a high risk to our capacity to maintain a viable, sustainable society then governments should address it urgently and decisively, and it would be folly not to do so. However, risk assessment is often confounding. Erring on the side of caution could entail either taking action to mitigate global heating or doing nothing. This chapter also discusses the costs of adapting to climate change, and the risks of leaving it for future generations to address.

Ranking of dangers

The essence of risk assessment is to rank dangers so we recognise which ones to address and in what sequence. This is far from straightforward. Do we rank dangers according to their probability of occurrence, or how damaging they would be, or how much forestalling them would cost, or a combination of the three? Further, in order to undertake a ranking that would be broadly acceptable, we need prior agreement on relevant criteria of danger. This is difficult to achieve because different people and groups (including countries) worry about different risks. For example, at the level of public policy there are four main areas of risk: the economy, crime, environment, and foreign affairs. If you work for the defence department, you might regard foreign threats as highest risk; if you belong to a green organisation, you will probably regard environmental degradation or global heating as the biggest threat; if you are unemployed, economic risk is likely to dominate your assessment. Further, those who are most concerned about foreign threats tend to be less concerned about environmental problems at home, while those worried about law and order on the streets tend to be less worried about

[1] George Eliot (Mary Ann Evans), *Middlemarch*, ch. 60.

matters such as income inequality, even though the two are related.[2] In short, broad agreement about criteria of danger is unlikely.

Proximity of events

There are additional complications. Perceptions of risk are in part a function of perceived distance – geographical and chronological – from relevant events: events closer in time and space appear more threatening and are usually assessed as higher risk than those further away. When an event is non-specific in space and apparently distant in time, such as global heating, our assessment of risk is often faulty. We can understand why remoteness in time would diminish our sense of risk, but why should spatial non-specificity be a problem? After all, if something is a risk only to me, I would address it, but it is no less of a risk to me just because it also affects everybody else, so surely my desire to address that risk would be the same. This may sometimes be the case – diabetes caused by obesity is a universal risk, so I address it by exercising and eating properly – but sometimes the general character of a risk diminishes our appreciation of it. For example, imagine that, because of a permanent atmospheric aberration, climate change affected only Australia. The Australian Government would probably take extravagant measures to curtail the nation's emissions and would, through the United Nations, vociferously demand that other countries follow suit. However, even though the global effects of climate change do not in any way diminish the specific threat to Australia, its government is quiescent. This is irrational. If, for instance, you had been shipwrecked alone, you would make the most strenuous possible efforts to save yourself, but if there were a thousand other people on the ship your efforts would not be less vigorous just because a thousand were drowning alongside you.

The future

Probably the main influence on assessment of risk is our sense of the future, and the main influence on that sense is poverty. Unsurprisingly, there is a correlation between poverty and foreshortened perceptions of the future. If you struggle each day to provide food for your family, you will probably live so wholly in the present that the future is beyond both

[2] Mary Douglas and Aaron Wildavsky, *Risk and Culture* (Berkeley: University of California Press, 1982) 2-3. Recent events in the United States, Britain and Australia – and a host of other countries – suggest that this observation is more pertinent now than in 1982.

your imagination and your care.[3] Unfortunately, this understandable concentration on the present is easily abused by those who have most to gain by maintaining fossil-fuel consumption. Suggestions to address global heating are broadcast, often by those who have gained most from the current economy, as a threat to the jobs and financial security of people who have gained least.

This highlights a problem with our sense of the future. Do perceived levels of risk diminish as a function of time? We usually think they do: the more remote the event the more we discount its effects.[4] If the trajectory of an asteroid takes it to within 1,000 kilometres of Earth this year, and again on its return in 40 years, we perceive the sooner event as carrying more risk, even though the actual risk of a collision with Earth is the same for both events. However, it can be misleading to assuming a negative correlation of perceived risk with time. If I am buying a house in an area that is inundated by 1-in-100-year floods, my risk is lower if I intend to live in it for five years, higher if I plan to stay for 40 years. In this example, my perception of risk, and actual risk, rises as a function of time. What about predictive risk? If my business plans are predicated on the identity of the political party in power, I can be somewhat confident about who is going to win next year's election, but have no idea who will win power in a decade. Conversely, if I am investing in the stock market then my risk is higher if I invest for a year, lower if I invest for a decade. This is because, despite the market's propensity to fluctuate alarmingly over the short term, over the longer term it reverts to the mean – which is rising. In short, our perceptions of risk are not straightforward.

Part of our confusion arises from the natural tendency to project today's events onto the future: what happens today is thought to be a good predictor of what will happen tomorrow. This projection is often useful, even life-saving, but can also be fallacious. If our ancestors

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[3] Douglas and Wildavsky, 85. Some of their observations are based on Oscar Lewis, 'The Culture of Poverty', *Scientific American*, vol. 215, no. 4 (October 1966) 19-25. Lewis found that people can be poor without inhabiting a culture of poverty. The culture of poverty is a dysfunctional way of life that perpetuates poverty and is transmitted from generation to generation. The characteristics of this culture include living with few or no expectations of, or plans for, the future.

[4] Though, as Frank Ramsey rightly asserted, discounting the enjoyments of or costs to later generations is 'a practice which is ethically indefensible and arises merely from the weakness of the imagination' ['A Mathematical Theory of Saving', *The Economic Journal*, vol. 38, no. 152 (December 1928) 543].

failed to project today's predator attack onto the same situation tomorrow, they might not have survived. On a more prosaic level, if on long weekends there is much more than the usual weekend traffic, it would be reasonable to predict that the next long weekend will also be busier than usual, so I should plan not to drive on those days. Conversely, though, if the stock market falls today then investors are foolish if they project that fall onto tomorrow's market and sell their stocks accordingly.

Perceptions of risk with regard to global heating are closest to the above examples of the stock market – certainty increasing with time – and buying a house on the floodplain – risk increasing with time. Herein lies an apparent contradiction. We usually associate risk with uncertainty, but with global heating that association is inverted. Despite short-term fluctuations, climate scientists are as certain as science can be that the globe's atmospheric temperature will continue to rise over the long term, and that concomitant risks – from heatwave, drought, extreme weather and so on – will also increase.[5] The point here is that certainty and risk can be correlated. Any sensible person would act to avoid nearly certain increased risk, so why can't we do the same when it comes to climate change? One answer is that an equally sensible person might think the cost of acting is too high to justify averting the risked event. In this case, a decision about climate change can appear like a callous actuarial exercise. It is partly for this reason that governments don't treat decisions about global heating as 'decisions under risk', let alone 'decisions under certainty'; rather, they tend to treat them as 'decisions under ignorance'.

Decisions under certainty, risk and ignorance

If a person is making a decision about buying a new car, she can choose between vehicles A, B or C. She is certain about the outcome – if she chooses B then she knows the sort of car she will get – so her decision is to determine which car will best suit her requirements. This *decision under certainty* can nonetheless be challenging because she still

[5] According to the IPCC's Fifth Assessment Report, 'it is *virtually certain* that there will be more frequent hot and fewer cold temperature extremes over most land areas on daily and seasonal timescales, as global mean surface temperature increases. It is *very likely* that heat waves will occur with a higher frequency and longer duration.' *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (IPCC, Geneva: 2014) 10 [italics in original].

has to weigh whether she wants a car better suited to city driving or long-distance touring, or that favours fuel economy over performance, and so on. If, however, she is buying a used car then she is not certain she will get what she especially wants – a reliable vehicle – but she has done her research and knows that C is statistically the most reliable of the three makes. Of course, she does not know whether this example of C has been well looked after, but she can assign probabilities to make this *decision under risk*. If she has to choose between makes D, E and F, about which she has little information and is unable to assign probabilities to their respective reliability, this is a *decision under ignorance* or *uncertainty*.

Decisions about addressing climate change should be classified as decisions under certainty or under risk. If countries do little or nothing about carbon emissions then it is certain that global temperatures will increase, but by how much is less certain. For instance, under an intermediate Representative Concentration Pathway (RCP4.5) for GHG emissions, the likely range for mean global surface temperature increase by 2100 is 1.1 to 2.6 degrees over the present mean temperature.[6] This is a broad range: most countries could probably adapt to a 1.1 degree increase, whereas a 2.6 degree increase would render some densely populated parts of the world either marginal or uninhabitable. Governments might be inclined to accept the lower cost but higher risk of an intermediate emissions regime and hope that temperatures do not rise by more than the lower estimate. Whichever regime a government chooses, lower emissions are correlated with lower temperature increases, but the likely range of increase means that correlating a specific emissions target with a specific temperature increase is a matter of probabilities, involving decisions under certainty or risk. This all appears straightforward, so why do many governments present decisions to address global heating as decisions made under uncertainty? An important reason is that governments are usually loath to make decisions based on probabilities; they are too nuanced and complex for the normal constraints of political discourse. Further, a decision based on balancing of probabilities will tend towards the middle ground between extreme action and total inaction. However, as Slavoj Žižek states, when it comes to global heating the worst alternative is to choose the middle way by taking limited measures because 'in this case, we will fail whatever occurs. There is no middle ground with regard to ecological catastrophe.'[7] Žižek's view is that climate change presents governments with the dilemma of doing

[6] Ibid. 60.

[7] Slavoj Žižek, *Living in the End Times* (London: Verso, 2011) 428-429.

everything, and risking ridicule if disaster does not occur, or doing nothing, and risk losing everything. Many governments seem to agree, ergo the attraction of an either/or decision which has the merit of presenting a controversial situation in binary terms that are easier to explain and sell to citizens, and defend from critics. Moreover, a decision under uncertainty is easily translated into an either/or choice. This uncertainty has very little to do with actual scientific doubt. It is a conflation of ignorance about what other countries will do to address global heating with allegations of uncertainty about the scientific evidence. In short, two different issues are fused in order to obfuscate both.

The 'Prisoners' Dilemma'

The prisoners' dilemma is a paradigm of an either/or decision made in ignorance about the intentions of another party. Briefly, two prisoners (A and B) jointly charged with a crime are held in separate cells. Each is given the option of confessing to the crime or staying silent. If both confess, they will each be sentenced to six years. If neither confesses, they will be convicted of a lesser crime and serve two years each. If one confesses and the other does not, the former will be released and the latter will be sentenced to 10 years. Being in separate cells, neither prisoner knows what the other will decide. This dilemma is represented by the following value matrix:

	B confesses	**B is silent**
A confesses	A = 6; B = 6	A = 0; B = 10
A is silent	A = 10; B = 0	A = 2; B = 2

The interesting result of this dilemma is that, no matter what the other prisoner does, each is better off confessing. If A confesses, B is better off if he also confesses; if A does not confess, B is much better off if he confesses – and vice versa. However, and here is the anomaly, the 'social' result (that is, the aggregate result) is *worst* if both confess (6 + 6 = 12 years) and *best* if neither confesses (2 + 2 = 4 years). The dilemma shows that what is optimal for the individual does not necessarily coincide with what is optimal for the group.[8]

[8] For a succinct account of the prisoners' dilemma, see Martin Peterson, *An Introduction to Decision Theory*, 2nd ed. (Cambridge: Cambridge University Press, 2017) 236-242.

Variants of the prisoners' dilemma have been applied to environmental matters. For example, consider a cluster of smokestack industries (A, B, C, D and E) in a single airshed. Each industry has the choice of either maximising its profit and belching untreated smoke into the atmosphere, or accepting a lower profit and thoroughly filtering its smoke before emitting it. If only one company emits untreated smoke, the airshed will remain reasonably clean, but if all do so then the airshed will be fouled. Environmental regulations are infrequently and feebly enforced and can therefore be disregarded. If you own A, and you do not know what companies B to E will decide to do, what choice should you select? The following matrix helps to clarify the situation:

	B-E pollute - unfiltered smoke	**B-E don't pollute - filtered emissions**
A pollutes - unfiltered smoke	Max. profit dirty air	Max. profit clean air
A doesn't pollute - filtered emissions	Lower profit dirty air	Lower profit clean air

It is very clear from this matrix that A should *not* filter its smoke: maximum profit and dirty air are better than lower profit and dirty air, and maximum profit and clean air are better than lower profit and clean air. This result holds true for each company. In other words, it is rational for each company to pollute the atmosphere. Little wonder, then, that before laws such as the Clean Air Act industrial regions usually chocked on their emissions. It would, of course, be better for everybody if each company agreed to filter its emissions and accept a lower profit. However, unless that agreement were enforced, or unless companies could trust each other, it would be irrational for any company not to renege on it. The necessity for stringent and well-policed environmental laws is clear.

The prisoner's dilemma has a disconcerting lesson about decisions made under ignorance of other parties' (such as governments) intentions: absent a substantial level of trust and cooperation, a rational decision to favour one party's utility will probably be a poor decision for the collective. What, though, about decisions made under (alleged) uncertainty about the science of global heating? The following construction will help to illuminate the matter.

Developing a value matrix for decisions under uncertainty about global heating[9]

In attempting to reflect common political perceptions, the first two points have been reduced to a binary choice.

Point 1 – there are two available decision options:
(1) Take action (entails activities on a scale that would involve significant cost)
(2) Do nothing (as if the possibility of global heating were not of serious concern)

Point 2 – there are two possible states of the world:
(1) Global heating occurs (with significant consequences, such as coastal flooding, that we want to avoid)
(2) Global heating does not occur (or does occur, but without significant consequences)

Point 3 – there are four possible outcomes:
(1) Take action, but heating occurs anyway
(2) Do nothing, and heating occurs
(3) Take action, and heating does not occur
(4) Do nothing, but heating does not occur

Point 4 – Assign values (from 0 to 100) to possible outcomes. The worst outcome is for heating to occur despite vigorous efforts to avoid it. The resources devoted to these efforts would have been wasted, so this outcome has a value of 0. The best outcome is to do nothing and for heating not to occur, or not to any significant degree. This outcome attracts a value of 100.

What about values between the best and worst outcomes? The cost of doing something is very significant, therefore (when considered only in and of itself) doing nothing clearly attracts a higher value. But what if doing something thereby prevents global heating? Obviously that value, though high, is less than the value of getting the same result for 'free', so it attracts a value of less than 100, depending on the costs of action (say 25 value points, so

[9] Some of the following is based on Ronald N. Giere's account in *Understanding Scientific Reasoning*, 4th ed. (Orlando, FL: Harcourt Brace, 1994) 287-289.

100 – 25 = 75). On the other hand, if global heating occurs whether action is taken or not, then it is obviously better to have done nothing than to have taken action but still endure the same result. Since we have assessed the costs of action at 25, then doing nothing is 25 points better than doing something but getting the same result. The value matrix will therefore be the following:

	No heating	**Heating**	**Total**
Take action	75	0	75
Do nothing	100	25	125

It is clear from this matrix that doing nothing is the best option: in practice, Žižek's dilemma favours inaction. It is hardly surprising, therefore, that those who benefit most from inaction – more than a few politicians, and industries that produce or rely on fossil fuels – will present their decision as one made under uncertainty. The obvious attraction of this matrix is its simplicity: apart from 0 and 100, only one other value – the cost of action – had to be assessed.

However, what about a political decision that reflected actual scientific opinion? In this case, the decision would reflect either (a) the majority scientific view (global heating is real, its effects will be substantial, and its causes must be vigorously addressed) or (b) the view of a substantial scientific minority (global heating will be more severe than the majority think it will be, so we should address its causes with proportionately more vigour). The view (c) of a tiny minority of scientists (global heating is scientifically controversial, which does not itself entail inaction but gives politicians an excuse not to act) would be dismissed as too peripheral to be relevant. It is clear that restricting a decision about global heating to options (a) or (c) is both irrational (in that it appears to attribute equivalent weight to both options, which is misleading) and unfair (because the views of a substantial minority are disregarded).

However, if we transform this into a value matrix the result is not so different from our first example. The best outcome is to take some action but still avoid severe heating, so it attracts 100 (the best result) – 25 (the cost of acting) = 75 points. The worst outcome is to take vigorous action (which costs 50 points) but endure severe heating nonetheless, so it

attracts 0 points. If we take vigorous action and thereby manage to avoid severe heating, this is worth 100 – 50 = 50 points. If we take some action but endure severe heating, this is worth 25 points because at least we have spent 25 points less than the 50-point cost of vigorous action.

	Heating	**Severe heating**	**Total**
Take some action (cost = 25)	75	25	100
Take vigorous action (cost = 50)	50	0	50

Scores in this matrix roughly reflect those in the first example: doing less is again the better option. It is apparent that, for decisions made under uncertainty about the intent of other parties or the reality or degree of global heating, doing little or nothing is an attractive option. The reasons are simple: first, agreements about climate change require the cooperation of all parties, but if one country decides to renege then it reaps any benefits from the agreement without having to pay the cost. Second, taking action to address climate change constitutes a definite cost, whereas outcomes of that action are less definite. More specifically, the former is quantifiable as a set of budget figures, whereas the latter is not only difficult to quantify but almost impossible to incorporate into a budget. Given that a government's 'forward estimates'[10] rarely extend beyond three to five years, and that governments seldom act on unbudgeted matters, most democracies are inadequately equipped to address long-term problems.

From the above it is evident that complex and controversial issues are unlikely to be resolved satisfactorily by presenting a basic 'payoff' matrix. Ironically, the simplicity and apparent rationality of such matrices make them a convenient explanatory device for decisions that are frequently beyond their capability.

[10] The official (albeit tautologous) name for a government's forecast budgetary position.

Costs of inaction

The above matrices are further misleading because there is at least one certainty about global heating: after a certain level of heating, taking action will most certainly be better than doing nothing. This is for the simple reason that the costs avoided by doing nothing remain a constant – we cannot do less than nothing, so the amount saved does not change – whereas the deleterious effects of global heating increase exponentially as the temperature rises. For example, a rise of 1.5 degrees would expose 14 percent of the world's population to at least one severe heatwave every five years, but with a 2-degree rise that percentage rises to 37 percent. Similarly, a 1.5-degree increase will reduce food yields for 32-36 million people, but at 2 degrees that figure rises to 330-396 million.[11] In short, the costs of not acting will inevitably exceed the costs of acting.

It follows that any government should realise that risk from inaction will quickly overtake risk from action. Given that most governments are risk-averse, the preference for action to address global heating should be clear. However, this is not often the case. While most governments *are* risk-averse, they are also act-averse because in certain circumstances there is greater perceived risk in acting that in not acting. As we have noted, action involves a cost and sometimes the perception of an uncertain goal, whereas inaction appears comparatively risk-free because it does not upset the forward estimates. Again, global heating requires a response that most governments are poorly equipped to provide.

Local versus global

If, in the pursuit of financial ammunition, we wanted to specify the point at which savings and costs intersect, we would encounter the fundamental problem that climate change is global but its effects are local, insofar as they have political relevance, and they vary considerably from place to place. For example, global heating has adversely affected parts of Tasmania, particularly in waters off the east coast, but not to the degree that its government is willing to undertake substantial action. On the other hand, California has endured unprecedented drought, wildfires and mudslides (caused by diminished vegetation cover) and its government is firmly of the view that substantial action is necessary and long overdue.

[11] Global Covenant of Mayors for Climate and Energy, 'Cities at the Forefront of Tackling Climate Change', *New York Times* (22 December 2018).

This global-local binary perception is a further reason for recalcitrance in developing a universally acceptable emissions policy.

This parochialism also illustrates Ronald Giere's point that, in decisions made by individuals, it is generally the person who makes the decision who benefits or suffers from the consequences of that decision.[12] This is not the case with policy decisions made by governments. Those who benefit from a decision might not be the same as those who suffer its consequences. Therefore, it is important to establish who is determining options and assigning respective values in choosing a course of action. Further, who determines whether a given state of affairs constitutes a satisfactory outcome, or whether to take a 'reasonable' gamble – reasonable for whom? – or to choose the 'safe' option – safe for whom?

Future expectations

These difficulties are compounded by our assumption – often unconscious – that the future will be a continuation of the present and that existing institutions and social regimes will endure. If we do not think they will persist then our expectations of the future will probably be uncertain and confused. For some, this might not be a bad thing: uncertainty and confusion may well be more desirable than continuity of a repressive status quo. However, when a whole society attempts to adapt to general uncertainty, the effect will be to undermine anticipated outcomes that hitherto appeared to be guaranteed by the endurance of institutions, modes of production and so on.[13] The problems for addressing global heating are clear. If endeavours to address climate change are perceived as adaptations to uncertainty, or as attempts to safeguard the future, then they undermine the current trajectory of society – by recognizing its uncertainty – and its future expectations – by recognizing the need to act for their preservation. Little wonder, then, that older people are often sceptical about global heating and therefore resist action to address it, because action would constitute an admission that the present system – in which they have flourished and on which they depend – will not endure.[14] There is a sociological anomaly here in that uncertainty clearly affects younger

[12] Giere, 289.

[13] Douglas and Wildavsky, 86-7. They refer in particular to calling in of debts and concomitant refusal to lend – that is, general loss of confidence in the face of future uncertainty.

[14] See, for example, Wouter Poortinga at al., 'Uncertain climate: An investigation into public scepticism about anthropogenic climate change', *Global Environmental Change*, vol. 21, issue 3 (August 2011) 1015-

people more than older people, because the former have to endure it for much longer than the latter, so in theory older people should be more willing to upset the status quo, having less to lose. All of this might explain why that cohort is so divided over global heating: on one hand many older people are resistant to change, but on the other they are extremely well represented at rallies to address global heating.

Intergenerational conflict

This situation highlights a further anomaly. Hitherto, environmental catastrophe strengthened the links between generations. A drought, for example, was perceived as an event that our parents' and grandparents' generations overcame, and that we and our children will also have to surmount. A generation was linked to both past and future by its ability to survive drought and then thrive. Global heating severs those links. Past generations were (largely) unaffected by climate change, and current and future generations will blame their forebears for causing it. Global heating shatters the environmental 'solidarity' that once bound generations together.

Disaster capitalism

Int*ra*generational solidarity is also fragile, but global heating is not fundamentally to blame. Environmental disasters used to bind disparate communities together. Divisions were to some degree set aside and groups had to act together to restore their neighbourhoods. This is no longer so. As Naomi Klein observes, disasters are now 'moments when we are hurled further apart. … disasters themselves are major new markets'.[15] Disasters provide the social rupture that generates business space for those corporations which thrive in the new realm of 'disaster capitalism'.[16] If public infrastructure, already weakened by cuts to government

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1024. They found that scepticism about global heating was common among older people from lower socio-economic backgrounds who are politically conservative and maintain traditional values.

[15] Naomi Klein, 'Disaster Capitalism', *Harper's Magazine* (October 2007) 50. Klein's hypothesis remains just as or even more relevant in the Trump era. See George Monbiot, 'From Trump to Johnson, nationalists are on the rise – backed by billionaire oligarchs', *The Guardian* (26 July 2019).

[16] Disaster capitalism may be subsumed under Marshall Berman's observations about 'the bourgeois capacity to make destruction and chaos pay' [*All That Is Solid Melts Into Air* (London: Verso, 1983) 103]. Disaster capitalism began and thrives in America, but has now spread to most countries. In Australia, a paradigm is the National Covid-19 Coordination Commission appointed to 'anticipate and mitigate the social and economic effects' of the pandemic [Prime Minister's media release (25 March 2020)]. As if it

funding, is unable to cope with catastrophe, or is even the cause of it, then the private sector is called on, largely by those responsible for infrastructure deterioration, to take over roles the public sector is no longer able to perform. Disaster capitalism does not replace public services and infrastructure so much as re-engineer the concepts of government support and responsibility. Corporations can and do provide security and law-enforcement services that hitherto were the domain of police, and they own and operate a growing portfolio of infrastructure – including roads and airports – that traditionally were the responsibility of government. Those who cannot pay for private security and infrastructure are ruthlessly segregated and/or ignored in the wake of disaster, while those who can pay are given privileged attention and services that have, through government contracts, been paid for by the public.

Every catastrophe affords an opportunity for disaster capitalism, but global heating provides a convenient and lucrative agglomeration of disasters. Catastrophic climate change is not a single event; it comprises a series of familiar disasters – drought, flood, heatwave, storm surge and so on – exacerbated by global heating. As a government cedes to private corporations its responsibility for disaster management, so its ability to respond adequately to crises dwindles to the point where it is little more than a facilitator for corporate activity, a conduit for public money to flow into private pockets. Attempts to tackle global heating therefore face two additional hurdles: a number of large and influential corporations – including Lockheed Martin and ExxonMobil[17] – have no real interest in fixing climate change because it will supply disasters of increasing frequency and profitability, while concomitantly governments are shrinking their capacity to both address the causes of global heating and respond to its effects.

Adaptation to global heating

Having noted above the problem of diminishing returns from doing nothing, what about adaptation strategies, such a building coastal walls to protect low-lying areas from sea level

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were deliberately complying with Klein's thesis, the commission's membership consists almost entirely of high-level businesspeople, most of whom have connections to the fossil fuel and mining industries.

[17] Apart from its obvious interest in maintaining fossil fuel consumption, 'the oil industry has consistently managed to turn disasters to its long-term advantage', often by securing reconstruction funds for fossil fuel infrastructure [Klein, 57].

rise? The problems with adaptation are manifold. Firstly, adaptation also suffers from diminishing returns because the impacts of global heating are not linear.[18] If it costs *x* percent of GDP to adapt to, say, a 1-degree rise in global temperature above current levels, then it will cost a lot more than 2*x* per cent to adapt to a 2-degree increase, and very much more that 3*x* per cent for a further degree, and so on. It is clear that adaptation would eventually cost more than any country could afford. Second, whatever the merits of adaptation, it obviously does not address the underlying cause, so no matter how widespread or apparently successful adaption strategies might be, they may be overtaken by the problem they purport to address. For instance, if a sea wall were built high enough to protect Miami from storm surge until 2100, it would still not protect the city from flooding because water from higher sea levels already percolates through the porous limestone upon which the city is built.[19] Third, any resources devoted to adaptation are resources *not* being used to address GHG emissions. Fourth, there are some effects of climate change for which there are few or no feasible adaptations. For example, regions of unsustainable farmland will expand because, above a certain temperature range and level of desiccation, farming becomes impossible, or the remedial inputs required become too extravagant to justify diminished agricultural outputs.

The problem of adaptation's diminishing returns has usually been overlooked by its champions. For example, Bjorn Lomborg acknowledges that in the United States the costs of hurricane damage have been increasing, but he claims this is due to much larger concentrations of people and property in hurricane-prone areas, not to global heating having caused an increase in the frequency and force of hurricanes.[20] Lomborg argues that, adjusted

[18] For example, if a rise of 2 degrees has *y* impact on human health, a 4-degree rise will have vastly more impact than 2*y* [Tim Flannery, *Atmosphere of Hope: Searching for solutions to the climate crisis* (Melbourne: Text Publishing, 2015) 20].

[19] Elizabeth Kolbert, 'The Siege of Miami', *New Yorker* (21-28 December 2015). Kolbert's article included an interview with Hal Wanless, chair of geological sciences, University of Miami.

[20] See, for example, Philip J. Klotzbach and Christopher W. Landsea, 'Extremely Intense Hurricanes: Revisiting Webster et al. after 10 Years', *Journal of Climate* (1 October 2015) 7621-7629. They found no significant change in the percentage or frequency of categories 4-5 hurricanes since 1990. Other examples are not amenable to Lomborg's view. For instance, high tide flooding of vulnerable US coastal areas has more than doubled since 2000, and this figure will double or triple by 2030, and increase up to 15-fold by

for population and wealth, hurricane costs were very consistent from 1900 to 2017.[21] This statement may be true, but it is also misleading. Hurricane costs per capita might remain stable, but costs exacerbated by global heating – from bushfires, desiccation, rising sea levels and so on – are all increasing.[22] This means that the *proportion* of GDP available to ameliorate hurricane damage is falling as climate change-related costs – that is, adaptation costs – are rising. It hardly matters, therefore, if hurricane-related costs per capita are stable; the problem is that the money available per capita to meet those costs is diminishing.[23]

Further, Lomborg's argument is predicated on his view that rising prosperity will more than offset increases in climate-related costs, but this is misguided. GDP represents the total value of goods and services consumed and produced by an economy, but this has almost nothing to do with the *availability* and *distribution* of money for specific purposes. In the US, for example, an increasing percentage of national wealth is accumulating in fewer hands. The richest 1 percent are now wealthier than the bottom 90 percent, and they receive more than 90 percent of newly created wealth, so this disparity is increasing.[24] At the same time, local authorities receive a constantly declining percentage of GDP, and therefore struggle to maintain basic infrastructure or provide essential services for their citizens. They are increasingly less capable of addressing infrequent – and therefore unbudgeted – calamities like hurricane damage. Lomborg's assumption that countries will use their increasing wealth to address natural disaster is naïve and disregards relevant evidence. For instance, it is instructive to compare the response by local and federal authorities to damage in New

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2050 [National Oceanic and Atmospheric Administration, Technical Report NOS CO-OPS 092, '2019 State of U.S. High Tide Flooding with a 2020 Outlook' (July 2020) 11-12].

[21] Bjorn Lomborg, 'Report's sensationalist claim of "climate breakdown" is catchy but untrue', *Weekend Australian* (19-20 January 2019). Lomborg is basing his argument on Jessica Weinkle et al., 'Normalized hurricane damage in the continental United States 1900-2017', *Nature Sustainability*, vol. 1 (December 2018) 808-813.

[22] In fact the *frequency* of extreme weather has soared since 1980. Economic losses from those events are now outstripping growth in global GDP, so adaptation strategies are becoming even less viable [William J. Ripple et al., 'World Scientists' Warning of a Climate Emergency', *BioScience*, biz088 (Nov. 2019) 2-3].

[23] Of course other costs, such as health and aged care, are also increasing per capita, but I am discussing only costs directly associated with climate change.

[24] For a brief summary see Nicholas Kristof, 'An Idiot's Guide to Inequality', *New York Times* (23 July 2014).

Orleans caused by hurricane Katrina in 2005 – tardy, piecemeal and incompetent – with the government's response to the global financial crisis in 2007-08 – well-targeted and generous protection of wealthy financial interests. In short, GDP is very different from fiscal priorities. Given that recent past behaviour is the best indicator of a country's future behaviour in allocating resources, and that in countries like America and Australia governments have patently failed to use their considerable wealth to address existing problems exacerbated by climate change, there is little reason to think that most governments will act more responsibly in the future.

Adaptation's diminishing returns are further exacerbated by 'tipping points' – thresholds beyond which there are irreversible and/or aggravated environmental effects. Irreversible melting of the Greenland ice sheet is a good example: it would raise sea levels significantly, and the reduced albedo effect from diminished ice cover would increase global heating. The problem for adaptation is clear: once a tipping point is exceeded the costs of adaptation rise suddenly and immensely. In short, threat of a tipping point should constitute a state of emergency. In this situation, urgency may be defined as the reaction time (t) to an alert about a threatened tipping point divided by the intervention time (T) remaining if we are to avoid that point. If the reaction time is longer than the intervention time – that is, if $t/T > 1$ – then we have lost control of that situation. As Timothy Lenton and his colleagues note, if $t = 30$ years to achieve net carbon emissions of zero, but T is rapidly approaching zero years in which to address emissions, then we have already lost the capacity to avoid one or more tipping points.[25]

Depression mentality

Adaption assumes that a wealthier future will entail increasing resilience, but this assumption is misguided. For example, before the Covid-19 pandemic unemployment in the United States was at its lowest level since about 1970. Australia's unemployment was also low. In both countries, however, almost no environmental disaster, including climate change, is deemed more important than the threat of job loss. Government agencies regularly justify a proposed environmental outrage by bullying opponents from the moral high ground of jobs created by a certain project, or jobs forgone if it is not approved. Such behaviour, however,

[25] Timothy M. Lenton et al., 'Climate tipping points – too risky to bet against', *Nature* (27 November 2019).

is more redolent of the Great Depression, when unemployment was 25 percent. Under conditions of nearly full employment and ample societal wealth this behaviour is fraudulent, merely an excuse to allow agencies to do what they like.

Cultural purposes

Why, though, has this mentality continued to flourish in a very different era, particularly given that those who lived through the Depression are now either dead or well beyond working age? The answer is that avoiding the disaster of mass unemployment became a powerful 'cultural purpose' in North America and elsewhere.[26] Cultural purposes usually arise in response to events that are perceived to threaten the wellbeing or even existence of a society. Whether these events pose an actual threat is largely irrelevant. Cultural purposes are clung to tenaciously and occasionally elevated into a mythical motif that serves to define a society. Removed from the conditions in which it arose, however, a cultural purpose can easily become a handy pretext to justify appalling decisions or perpetuate destructive and outdated ideas.

For example, after World War II the American automobile industry was seen as the overriding instrument through which unemployment could be avoided. Few or no community or environmental values were allowed to impede the automobile: the national highway system, the erasure of inner city neighbourhoods, and even the removal of competition from public transport all facilitated, or were the results of, an industry whose mythology became more important than its reality. In the 1950s, one-fifth of America's gross national product was dedicated to the automobile, and the country owned three-quarters of the world's cars. The automobile defined and delivered America's cultural memes of limitless space and individual freedom to explore it. Moreover, as Robert Hughes appositely noted, for most Americans a car was 'the most eloquent sculptured object in their lives. … [Cars] were designed and marketed as fantasies.'[27] It was this potent mythology that underlay President Bush's statement at the 1992 Earth Summit in Rio de Janeiro that the 'American way of life is not negotiable'. However, the president was oblivious to the fact that America's automotive fantasy had long since betrayed its country. Up until the oil crisis of 1973, America's car manufacturers changed the style of their products every year; ergo, most cars

[26] As Jane Jacobs observed in *Dark Age Ahead* (New York: Vintage Books, 2005) 55-60.

[27] Robert Hughes, *American Visions* (London: Harvill Press, 1997) 505-506.

were stylistically outdated a year after they were produced. Underneath bigger tail fins, more sheet metal and additional chrome, however, this policy of dynamic obsolescence disguised mechanical platforms that remained crude and underdeveloped. When cars from overseas manufacturers began to infiltrate the American market, local products could not compete. Designed and built by companies concerned with technology rather than mythology, foreign cars were more fuel efficient, better built, more reliable and handled better than the American behemoths they rapidly replaced. The way of life President Bush sought to defend had been in retreat for a decade. By the time his son repeated the same sentiment in 2001, America's automobile industry was almost on its knees, employing a fraction of its 1950s workforce.[28] President George W. Bush's statement was testimony to the endurance of a cultural purpose that had morphed from protecting jobs to a defining myth that it was un-American to consume less fuel.

There is a further consequence of America's automotive fantasy. Cars, and the infrastructure to support them, have been overriding factors in reducing countries like America and Australia to very poor levels of energy efficiency. Further, the automobile separates, and even segregates, people from each other, whereas most activities that are or would be effective in mitigating carbon emissions require communal cooperation.[29] This is obvious for things like shared or public transport, but cooperation is no less required for improved planning, housing and distributed electricity generation. Unfortunately, community spirit is not easily rebuilt. As Jane Jacobs argued, 'not TV or illegal drugs but the automobile has been the chief destroyer of American communities'.[30] This means that the cultural asset required to mitigate carbon emissions produced by cars – strong and effective community spirit and cooperation – has itself been vitiated by cars. More broadly, a critical capacity for

[28] Asked whether President George W. Bush would call on America's drivers to reduce their fuel consumption, his press secretary replied, 'That's a big no. The president believes that it's an American way of life.' Quoted in Peter Singer, *The President of Good and Evil* (Melbourne: Text Publishing, 2004) 160.

[29] As Jan Gehl argues, cars were decisive in creating cities whose forbidding dimensions and confusing scales are antithetical to shared urban spaces and human wellbeing [*Cities for people* (Washington: Island Press, 2010) 55-57].

[30] Jacobs, 37. Jane Jacobs is probably best known for her fight to preserve SoHo, Lower Manhattan, from expressways proposed by Robert Moses, New York's Planning Commissioner. Albert Borgmann similarly argues that automobiles were the 'catalyst of destruction' of urbanity [*Crossing the Postmodern Divide* (Chicago: University of Chicago Press, 1992) 129].

the survival of any society – its ability to respond effectively to novel circumstances – has also been undermined because the infrastructure required by automobiles is probably the globe's most intransigent example of technological inertia.

Technological inertia and maturity

Once a technology is entrenched, it can be difficult or even impossible to do something else. This appears to contradict our taken-for-granted view that technology is constantly changing, and our individual fears of being left behind by new and unfamiliar gadgetry. In reality there is no contradiction; it is just that our obsession with new technology, particularly electronic communication, often obscures the immobile antiquity of so much that we use every day.

A paradigm of technological inertia is the device I am using to write this monograph. The qwerty keyboard was invented to overcome problems with the ungainly and fragile mechanisms of early typewriters. Keys were positioned to separate common letter pairs and thereby reduce jamming of the strike arms. Ease of learning or using the keyboard were irrelevant. Better typewriters, let alone electric typewriters and computers, rendered the qwerty layout obsolete well over half a century ago.

Future generations can solve the problem

Notwithstanding technological inertia, the seduction of technology can persuade us to defer responsibility for CO_2 mitigation to subsequent generations. If we imagine that technology can fix a problem, then it is more likely that the next generation, which we assume will possess better technology than we have, will discover it, and more likely still that the generation after it will uncover a solution. We take for granted that any future generation will enjoy superior technology over its predecessor.[31] However, this assumption is only half right because technological progress is very uneven. For example, Boeing's 747 has been

[31] In this context, 'superior' can be misleading. For example, SUVs now comprise 40% of new car sales worldwide, up from 17% in 2010. Their size, weight and poor aerodynamics mean they use more fuel than comparable cars. Therefore, more people are choosing *inferior* technology – with reference to CO_2 emissions and climate change – even though much better options (for the environment) are available.

flying for 50 years.[32] It has improved significantly over five decades, but remains fundamentally the same aircraft. Compare this rate of technological development to the 40 (let alone 50) years before it. There were no jet engines. Boeing's passenger aircraft of the late 1920s carried one hundred times fewer passengers than a 747 and flew nearly six times slower. Clearly the rate of aircraft development has slowed dramatically.[33] There are several reasons for this – airport capacity, fuel costs, airline requirements and so on – but the overwhelming reason is technological maturity.

Technological maturity

A new technology is often characterised by developmental leaps that explore the technology's little-known potential; in a mature technology these leaps give way to incremental improvements. Moreover, the resources – particularly money and time – required to achieve further improvements increase with maturity. An input that might formerly have achieved benchmark development is later able to produce only minor improvement. With regard to climate change the problem is confronting: most of the technologies available to address global heating – solar panels, wind turbines, batteries, hydrogen fuel cells and so on – are mature. None of them is likely to improve more than incrementally. Of course, this does not preclude a technological breakthrough in a different, and currently unforeseen, field. Absent such a breakthrough, however, for at least the next few decades the technology available for mitigating carbon emissions will be much the same

[32] Both the 747 and the Concorde made their first flights in 1969. It is noteworthy that we sometimes talk about 'nostalgia' for the Concorde, but this is misleading. Nostalgia is a sentimental yearning for the past, whereas Concorde represents a level of technology we feel no longer able to attain. Our feelings about it are more like a sense of wonder because Concorde upsets our assumption that we are more technologically advanced in all areas than previous generations.

[33] Perhaps the most striking example involves recent debate in Canada over whether to purchase America's F-35 fighter aircraft. The F-35 was designed in the 1990s and notoriously has been plagued with development and design problems. Its capabilities are generally thought insufficient for Canada's requirements. As an alternative, some experts have called for the Canadian government to resurrect the Avro Arrow, a Canadian designed and built aircraft which first flew in 1958. The Arrow project was controversially cancelled in 1959. The idea that a 60-plus years old design could legitimately be regarded as equal, let alone superior, to the latest American military aircraft is sobering. Compare this lack of progress to the 60 years before the Arrow. At the beginning of this period, the Wright brothers were some years from making their first flight.

as we have now. However, effective use of this technology has so far proved beyond the capacity of most governments. Even though most countries have at least some renewable energy, and a few (such as Denmark and Sweden) have harnessed this technology to a significant degree, global carbon emissions continue to rise.[34] In 2017, emissions rose by 1.6 percent after three years of little to no increase. Unfortunately, emissions did not return to previous levels: in 2018 they increased again (by 2.7 percent over 2017) mainly due to rising demand for fossils fuels. Use of renewable energy technology continues to expand, but this growth is unable (or barely able) to offset increasing global emissions, let alone reduce those emissions to zero.

Excursus – Covid-19 and risk assessment

The Covid-19 pandemic has shown how deficient most of us are in assessing risk. This is particularly evident in widespread criticism of lockdowns. This criticism is not usually directed at lockdowns *per se* but at apparent inconsistencies in their implementation. For example, at one stage we were allowed to go to the supermarket or hairdresser but not to the farmers' market or local playground, even though, with social-distancing provisions, the risk of viral transmission was no more, and probably less, at the venues we were not allowed to attend. These decisions were based partly, but not solely, on necessity. Sure, we have to buy supermarket groceries, but some people obtain nearly all their food from farmers' markets, and we don't have to visit the hairdresser, so these decisions appear somewhat arbitrary. Why shut venues C and D if attending them carries no more risk than going to A or B? A lot of media commentators and citizens blamed the government for lacking common sense.

The answer is that, in this instance, risk is cumulative. If A, B, C and D carry roughly the same risk, then I should *not* go to C and D – or B for that matter, even though it's open – if I have visited A. If my risk in attending A is x, then my risk in also visiting B rises to $2x$, and to $3x$ if I also visit C, and so on. When the government issued a directive to close C and D, it was not necessarily saying these venues are more dangerous than A and B. It was merely lowering risk by minimising opportunities for infection.

[34] R. B. Jackson et al., 'Global energy growth is outpacing decarbonization', *Environmental Research Letters*, vol. 13, no. 12 (December 2018).

There is a contradiction here. With respect to Covid-19, most governments err on side of caution by actively imposing restrictions, but with regard to climate change they exercise caution by refraining from action.

Conclusion

Our individual and collective abilities to assess risk are modest. Governments are risk-averse, but their caution can be expressed in various or even contradictory ways. In particular, most governments are willing to 'accept' risk about climate change on behalf of those who have no say in the matter – children and future generations. As Ulrich Beck argues, risk has become:

> a kind of collective obsessional memory of the fact that our decisions and mistakes are behind what now confronts us. Global risks are the embodiment of the errors of the whole industrial era; they are a kind of collective return of the repressed.[35]

We have inherited the risk that former generations accepted on our behalf, and now find ourselves consumed by their mistakes and constrained in our capacity to rectify them. In short, with regard to climate change risk has melded into folly. The next chapter explores what can happen when folly and risk combine to produce tragedy.

[35] Ulrich Beck, *World at Risk*, Ciaran Cronin trans. (Cambridge: Polity Press, 2009) 100.

Chapter 5
Ancient Genocide

Overview

The destruction of Melos in 416 BCE is a paradigm of poor risk assessment combined with folly. Thucydides' account of negotiations between Melos and Athens is instructive in providing a template of dialogic breakdown caused by incompatible versions of reality. This episode provides an example whereby ancient and modern hermeneutic horizons are fused in order to throw light on both.

Poor risk assessment: modern lessons from an ancient example

There is of course no historical precedent for the current global problem of addressing a self-inflicted climatic crisis, but there are numerous precedents for people, groups and governments making irrational decisions because they are influenced by the *possibility effect* and/or the *certainty effect*. Daniel Kahneman defines the former as giving more weight to highly unlikely outcomes, and the latter as giving less weight to almost certain outcomes, than their probabilities justify.[1] Under the possibility effect we tend to put too much emphasis on small risks and unlikely outcomes, whereas under the certainty effect we tend to put too little emphasis on highly likely outcomes. In brief, probabilities can lure us into poor reasoning about them. For example, gamblers indulge in the possibility effect by placing too much weight on their small chance of winning, while governments that were completely unprepared for Covid-19 had not given sufficient weight to the very high probability they would one day face a pandemic. Governments that fail to address climate change were, and are often still are, misled by both effects. They gamble on the very small possibility that global heating might not occur (or might not be severe) and underemphasize the near certainty that it will.

One of the clearest examples of what can happen when these effects are confused or disregarded was the destruction of ancient Melos. This island (modern Milos) lies about 150 km SSW of Athens, and about 175 km east of Sparta. During the Peloponnesian War between Athens and Sparta and their respective allies (431 - 404 BCE), Melos endeavoured to maintain its neutrality. This was unacceptable to Athens. In 416, an Athenian fleet and

[1] Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux, 2011) 311-314.

army arrived at Melos, its envoys demanding that Melos join the Athenian empire or face the consequences. The ensuing dialogue between Athenians and Melians is recorded in Thucydides' history of the war.[2] This exchange is a paradigm of what occurs when a government, faced unequivocally with its polity's obliteration, knowingly makes the wrong decision.

Thucydides as historian and observer: lessons for all time

Near the beginning of his history, Thucydides wrote that his method in recording the numerous speeches delivered during the war was 'to make each speaker say broadly what I supposed would have been needed on any given occasion, while keeping as closely as I could to the overall intent of what was actually said'. In short, the speeches were composed by Thucydides and reflect his view of what can be learned from various episodes. His general aim was to provide 'a clear understanding of what happened – and, such is the human condition, will happen again at some time in the same or a similar pattern'.[3] Thucydides is not proffering a crude theory of historical repetition but rather asserting the enduring value of studying how people and societies act. More specifically, he is analysing political societies in which 'decisions are taken by rational and open discussion and in accordance with rational principles'.[4] These societies are organised and act according to rational self-interest, but Thucydides wants his reader to discern that, in certain situations, this perceived self-interest can be irrational and self-destructive. He intends his history to be instructive and insightful for all time.

Melos faces existential threat

Prima facie, the destruction of Melos and the modern threat of climate change have nothing in common. However, the response of this ancient state to the prospect of almost certain annihilation is instructive because the Melians rehearsed most of the reasoning and arguments advanced by modern states for not addressing climate change. Indeed, there are at least 10 points of similarity – keeping in mind that global heating is to us what Athens was to Melos – and each point throws light on our modern situation.

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[2] Thucydides 5.84-113.

[3] Ibid. 1.22.

[4] Oswyn Murray, 'Greek Historians' in *The Oxford History of the Classical World*, John Boardman, Jasper Griffin and Oswyn Murray eds (London: Oxford University Press and Book Club Associates, 1986) 195.

1. Do not give the people a voice

The Athenian envoys talked only to the Melian oligarchy; they were not given access to the people at large. The envoys' view was that the privileged few clearly did not want the masses confused by 'seductive and unchallenged argument'.[5] The oligarchs did not want the rest of Melos to hear arguments that might persuade them by appealing to unanswerable common sense. The people were given no say, and their views were not canvassed, in a situation and about a decision that would decide their future.

2. The situation is plain to see and the alternatives are clear

The Athenians possessed an army and navy that were magnitudes more powerful than anything Melos could muster. The oligarchs knew, and were told, that their choice was either submission to Athens or destruction. The Athenian envoys asked pointedly whether the Melians were meeting them with the 'explicit purpose of considering how to save your city in the present circumstances *which are plain to your eyes'*.[6] The oligarchs agreed that the meeting was about Melian survival, and the envoys were clear that it was in both parties' interests that Melos should survive. Thucydides is meticulous in presenting the situation such that the Melians could not be confused about or unaware of the consequences of their decision.

3. Discuss irrelevant matters

The Melians appealed to the principle of the common good such that a state which found itself in danger should be able to make a case for less severe treatment. They added that this was much more in the Athenian interest – 'given the massive retaliation you would face … should you fall from power'[7] – than the Melian. The envoys responded that this hypothetical gambit was irrelevant – 'a danger you can leave to us'.[8] They made it clear that Athens was acting in its own interests, that what they proposed would save Melos, and that appeals to morality or justice were simply beside the point. The Melians were arguing as if this were a dispute between roughly equal parties: if one argument did not work then they could advance another in stating their interest. The oligarchs' arguments were reasonable and their points

[5] Thucydides 5.85.

[6] Ibid. 5.87 (my italics).

[7] Ibid. 5.90.

[8] Ibid 5.91.

were valid, but they did not address the stark reality that confronted Melos. The Athenians put it baldly and factually: 'You are not in an equal contest, so questions of honour maintained or shame avoided have no relevance'.[9]

4. Think about resisting an irresistible force

The Melians had their own prognostications about the future, but the Athenians continued to remind them that they should be thinking about their survival, not about resisting or trying to fob off a vastly superior force. The envoys asserted that states like Melos were among those 'most likely to take an irrational risk and bring themselves and us into *entirely foreseeable* danger'.[10]

5. Depend on hope and divine intervention

The Melians proffered a view that the uncertainties of war can overcome discrepancies in power. If they gave in to Athens, all hope would be gone, but if they maintained hope then they could 'stand upright'. The envoys replied that 'hope counsels risk' and is a delusory spendthrift. Those who stake all on hope 'only recognize her for what she is when they are ruined and she has left them no further chance to act'.[11] The Athenians again reminded the Melians that they were perilously close to destruction. They warned the oligarchs not to do what others often do when under pressure: instead of choosing a practical and earthly means of deliverance, they turn to divination, oracles and other sources of unfounded and ultimately destructive optimism. The Melians believed they were in the right and would therefore enjoy divine favour. The Athenians replied that they also enjoyed divine favour, so Melian confidence in help from the gods was misplaced.

6. Trust in unlikely events

The Melians believed that Sparta would come to their aid, which prompted the Athenian reply: 'we can only admire your innocence and pity your folly'.[12] The envoys presented clear evidence that Sparta would look after its own interests first, and was most unlikely to send a

[9] Ibid. 5.101.

[10] Ibid. 5.99 (my italics).

[11] Ibid. 5.103.

[12] Ibid. 5.105.

force to Melos given that Athens controlled the sea. Moreover, external threats had never before caused Athens to abandon a siege, so Melian beliefs were doubly groundless.

7. Avoid confronting reality

The Athenians reminded the oligarchs that they were supposed to be negotiating for the survival of Melos, but they had failed to say anything that would signal that intent: 'so far there has been no logic in your attitude'.[13] Indeed, the oligarchs themselves had most to lose. Their accustomed position as rulers of Melian life had given them a false sense of immunity from the vicissitudes of ordinary citizens.

8. Base your choice on obstinate pride

The Athenians warned the Melians not to embrace the false sense of shame to which people turn when the danger they confront is obvious but they think their honour is threatened: 'the results are almost always catastrophic'.[14] People are lured on by the seductive attraction of preserving their so-called honour, becoming victims of a 'mere word' by bringing a much bigger disaster on themselves and thereby incurring a greater loss of honour than the loss they were trying to avoid. The Melians were counselled to make a decision based on one thought only: the survival of their state.

9. Disregard advice and do what you have always done

The oligarchs decided to put their trust in the divine good fortune that had preserved Melos for centuries, and also look to Sparta for help. They even proffered the following terms to Athens: 'to accept us as friends and neutrals, and to leave our land with a treaty made between us as best serves both our interests'.[15] This decision simply ignored all warnings and evidence to the contrary.

10. Disregard plain evidence in favour of hoping for the best

The Athenians' final response was a statement of straightforward common sense: Melians must be alone in thinking that 'the future is more certain than the evidence of your

[13] Ibid. 5.111.

[14] Ibid. 5.111.

[15] Ibid. 5.112.

own eyes, and regard speculation as present fact, as if mere wishing will make it so'.[16] The Athenians further asserted that the more Melos trusted in Sparta, luck and hope, the greater would be their downfall.

An inevitable result

After discussion ceased, Athens began a siege of the island's city. Most of the Athenian forces then departed to deal with other matters, which allowed the Melians to capture a section of the siege wall and kill a few of the remaining garrison. This small victory probably reinforced the Melian view that they made the right decision. Their optimism was short-lived. Athens sent another force to continue the siege, and Melos surrendered unconditionally. All adult men were executed, and all women and children were enslaved. It is the best documented ancient genocide.[17]

Points of similarity

There are points of similarity between Melian obtuseness and most governments' response to the threat of global heating:

(1) In many countries (Australia is a prime example) a solid majority of people want action on climate change, yet governments prefer to listen to oligarchs and plutocrats, such as small groups of fossil fuel producers and other interested parties.

(2) Evidence for global heating is clear, and the consequences of action or inaction are well known, so any response that does not address it is irrational.

(3) Reality does not become less real just because we prefer not to address it.

(4) Many governments have hoped, or have acted as if they hoped, that global heating will simply go away. By the time they realise their hopes are illusory the opportunity to act effectively might have passed.

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[16] Ibid. 5.113.

[17] See the case study of Melos in Frank Chalk and Kurt Jonassohn, *The History and Sociology of Genocide* (New Haven: Yale University Press, 1990) 65-73.

(5) If we stake everything on future events (such as new technologies) to fix global heating then we are setting ourselves up for disappointment or destruction.

(6) It is worth asking any government, 'You must surely be invested in your country's and people's survival and wellbeing, but where and what is the evidence for it?'.

(7) A mythical or cultural construal by which a polity defines itself can be so compelling that a government may act to defend that construal as if it were a matter of actual self-preservation, but thereby imperil that polity's survival.

(8) In refusing to address climate change, some governments are becoming dysfunctional, because refusal to confront reality infects other and eventually most areas of governance.

Prospect theory

The destruction of Melos was a paradigm of prospect theory, of which the possibility and certainty effects are important factors. An equally significant factor is the 'reference point'. When faced with decisions involving risk, we first determine a baseline, and thereafter evaluate gains or losses with reference to that baseline.[18] For example, imagine you are given $1,000 and are then asked to choose between the following: a 50 per cent chance to win $1,000 OR definitely receiving $500. Daniel Kahneman found that a large majority of people preferred the latter option.[19] Now imagine you are given $2,000 and asked to choose between a 50 per cent chance to lose $1,000 OR definitely losing $500. In this case, a large majority chose to gamble on the first choice. If utility of wealth were all that mattered then each example should yield the same choice, because in both situations the options have *identical* results. In both you can choose either the certainty of being richer by $1,500, or gamble on being richer by $1,000 or by $2,000. Why, then, did most people not choose the same option in each situation? The answer can be found in the reference point or baseline. In the first example, the baseline is $1,000 more than you currently have, and $2,000 more in the second example. If you choose the $500 option under either example, the result, as we have noted, is exactly the same – you will be $1,500 richer – but you will *gain* $500 in the first example, and *lose* it in the second. In short, the baseline determines your perception of

[18] Peterson, *Decision Theory*, 315.

[19] Kahneman, 280-282.

loss or gain. This is important because we tend to be loss averse: we usually perceive losses as more significant than gains, even if the outcomes are equal. Ergo, most people in these examples opted to choose the certain gain but gamble on avoiding the certain loss.

Kahneman thinks that this asymmetry has an evolutionary origin: organisms that regarded threats as more urgent than opportunities probably had a better chance to survive and reproduce. The problem with this hypothesis is that organisms which exploited their opportunities, though initially enduring a higher rate of mortality, would be better equipped to survive and thereby gradually displace their less adventurous competitors. My own view is more prosaic: 'loss' and 'gain' both carry considerable linguistic, sociological and psychological baggage, and we find it difficult, but certainly not impossible, to set aside such baggage in weighing risks and coming to a rational decision.[20]

The Melians demonstrated extreme loss aversion. Their perceived baseline was the status quo – the situation they enjoyed immediately before the Athenians arrived on Melos. Their expected loss from that level was the single most significant factor in determining their decision. They would have acted more rationally if they had located their baseline near the level of obliteration to which Melos would almost certainly have been reduced if Athens sacked the island. Indeed, the Athenians told them as much: 'there is no disgrace in yielding to a great city [that has the power to destroy you] which offers you moderate terms'.[21] Instead of focussing on their potential gains – how much better off than obliteration they would be – the Melians focussed on their potential losses, weighing the latter as much more significant than the former, even though their loss from a baseline of neutrality to being a tribute-paying ally would be insignificant compared to their gain from a baseline of devastation to being an ally. Congruent with his intention to show how people and societies function, Thucydides wanted to demonstrate that the Melian choice to risk catastrophic loss

[20] With regard to psychological factors, it is worth noting the link between physical pain and economic insecurity. The prospect of economic loss and insecurity can be physically painful. Ergo, when we see people wince as the stock market falls and their savings dwindle, they might be in actual pain. This is a further reason for people putting more emphasis on avoiding pain than on an equivalent gain [Eileen Y. Chou, Bidhan L. Parmar, Adam D. Galinsky, 'Economic Insecurity Increases Physical Pain', *Psychological Science*, vol. 27, no. 4 (April 2016) 443-454].

[21] Thucydides 5.111.

in the futile hope of maintaining their status quo was the product of normal decision-making in which emotional attachment to what people have vastly outweighs rational consideration of what they should reasonably expect.[22] In short, when faced with bad options, decision-makers act with predictable irrationality.

Genocide averted

The Melians behaved predictably, but predictability is not inevitability. To illustrate this thought it is worth comparing Melos's fate with that of Mytilene: the two form companion narratives in Thucydides' history. In 428, Mytilene – a polis on the east side of Lesbos, about 340 km by sea from Athens – revolted against Athenian hegemony. The revolt failed and Mytilene was forced into negotiations with its Athenian occupiers. In Athens, the assembly decided to execute those responsible for the uprising (they were being held in Athens) and also kill every man in Mytilene, and enslave the women and children [3.36]. The parallel with Melos is clear and deliberate. A ship was dispatched with an instruction for the Athenian commander in Mytilene to carry out the assembly's decision.

On the following day, however, there was a general change of heart; a majority of citizens wanted a second debate. Cleon, who had prosecuted the original decision, again argued in favour of punishment. Diodotus, who had argued against Cleon's original motion, spoke again in favour of clemency. Thucydides is careful to display the merits of both speeches; the reader is presented with good arguments for either decision. Cleon's arguments are largely expressions of realpolitik:

1. There is a difference between personal and political values

Athenians exercise a lot of trust in their everyday lives, but it is a mistake to extrapolate that attitude to dealings with other cities and peoples [3.37].

2. Hegemony is about strength, not pity

Athenian hegemony is imposed by force on unwilling subjects, not by making concessions to them. An empire is not a popularity contest. Displays of weakness are dangerous for Athens and elicit no gratitude from subjects.

[22] This point reflects Josiah Ober's view in *The Rise and Fall of Classical Greece* (Princeton: Princeton University Press, 2015) 217.

3. Vacillation is weakness

Consistency in decision-making is vital. Imperfect laws reliably enforced are more effective than good laws erratically enforced.

4. Appeal to the ordinary citizen

Citizens who are less intellectual and sophisticated have more common sense and make better decisions than clever people. Good decisions are not produced by contests of wit and rhetoric.

5. Volition equals guilt

Mytilene's revolt was not involuntary. Its people knew full well what they were doing: 'there can be sympathy only where there is no deliberate intent' [3.40].

6. The crime merits the punishment

Cleon invoked the well-established and long-accepted principle of *talio* (punishment in kind). Mytilene's punishment is deserved and will send a clear message to Athens' enemies that the penalty for revolt is death [3.40].

Diodotus responded to some of Cleon's arguments, but his main points appealed to broader ideas about Athens' interests.

1. It is not a sign of weakness if a government changes its mind

Diodotus disagreed with those who objected to additional debate on major issues, who regarded a decision as inviolable, or who thought that revisiting a debate showed irresoluteness and ambivalence. He deemed them as either fools or interested parties. Diodotus regarded haste and anger as the two biggest impediments to good decision-making: 'anger is the fellow of folly, and haste the sign of ignorance and shallow judgment' [3.42].

2. Bad ideas are usually propelled by bullying than by argument

Those who promote a bad cause usually realise the impossibility of giving a good speech in its favour, and so rely on slander to bully both opposition and audience [3.42].

3. A polity's dysfunction is evident in its inability to distinguish bad from good advice

Athenian politics had become so dysfunctional that 'good advice straightforwardly given is no less suspect than bad advice' [3.43]. The advocate of a disastrous policy can win support only through deception, but in a dysfunctional government the proponent of a good policy may have to lie if he is to be believed.

4. Decisions should be based on long-term benefits, not short-term satisfaction

The issue Athenians should focus on was not Mytilene's guilt but the wisdom of Athens' response. Diodotus would recommend neither execution nor clemency unless that decision were 'clearly to the good of our city. … the decisions we should be taking are more about the future than the present' [3.44].

5. Decisions must be based on evidence

Diodotus observed that, in hoping to reduce crime, Athens had prescribed the death penalty for many offences, yet crime continued, 'so either we must find some still more powerful deterrent, or at least recognise that this deterrent has no effect' [3.45]. Cleon's proposal might satisfy some citizens' craving for revenge, but there was no evidence it would work in Athens' favour.

6a. It is pointless to address a problem without tackling its underlying causes
6b. Hope mixed with desire may blind a polity to clear dangers

The causes driving people to take extraordinary and dangerous risks were poverty and power. The former leads to boldness propelled by desperation, and the latter leads to greed. Both are attended by hope and desire, and 'where desire leads, hope follows. Desire develops the plan, and hope suggests that fortune will be generous. Both are ruinous, because their invisible influence is more powerful than the dangers in plain sight.' [3.45].

7. Making the best decision might involve modifying, or abandoning, a long-held principle

Diodotus concedes that Cleon's appeal to justice is attractive because Athenians were still incensed about Mytilene's revolt. However, this was not an argument about legal principles; 'this is a political debate about how best they can serve our interests' [3.44]. Moreover, even if Mytilene were justly destroyed, Athens would be committing an act of injustice on Mytilene's common people (*demos*), who bore no responsibility for the revolt.

This would not serve Athens' future interests because it would signal to the *demos* in other cities that Athens does not discriminate between guilt and innocence, so people have nothing to lose if they join a revolt [3.47]. In other words, indiscriminate application of justice might have unjust consequences and work against Athens' own interests.

8. Strength and aggression are not the same

Athens will demonstrate greater strength by adopting a well-reasoned policy towards opponents than by resorting to aggressive action that combines force with folly [3.48].

After hearing both speeches, the assembly voted, by a narrow margin, for clemency. Another ship was dispatched to Mytilene. With dramatic intensity, Thucydides relates the second trireme's efforts to catch the earlier ship. However, the latter had too much lead and arrived first. The Athenian commander in Mytilene received the order and was preparing to carry it out when the second ship arrived. As Thucydides drily noted, 'This was how close Mytilene came to destruction' [3.49]. It was also an observation that chance may play more of a role in our affairs than we care to admit.

Both speeches have points in common. In particular, both are wary of rhetoric, yet both demonstrate high levels of rhetorical skill. However, whereas Cleon condemns dazzling speeches for preying on the gullibility of an audience [3.38], Diodotus asserts that speech is the only medium by which action will be decided. It is, therefore, a threat to the polis if people condemn a good speech and speaker as motivated by money. In so doing they condemn Athens to losing the advice of those who have something important to contribute but are too unnerved to put themselves forward [3.42].

A further point is that, rather than addressing each of Cleon's arguments on its own terms and within its discrete area of discourse, Diodotus expands the area of debate. For example, Cleon's argument might satisfy the assembly's short-term interests and demand for justice, but it fails in a discussion about the long-term wellbeing of Athens.

Points of similarity

Like the Melian genocide, there are points of similarity between Athenian debates on the fate of Mytilene and deliberations by governments about addressing climate change.

(1) Government decisions are not holy writ. The modern Westminster idea that it is better to defend a poor decision than admit error or uncertainty is a sign of governmental fragility.

(2) It is possible (if infrequent) for good decisions to sell themselves because they are better able to muster convincing levels of rationality and evidence in their favour.

(3) A healthily functioning government is able to encourage, receive, assess and accept good advice.

(4) A government that fails to discern its country's long-term interests, let alone act in them, is facing an identity crisis. This is evident in its pandering to specious interests rather than citizens' long-term wellbeing.

(5) Poor decisions based on short-term expediency, or immutable dogma, rather than evidence are likely to be repeated.

(6) Failure to address underlying problems in favour of short-term spurious solutions may blind a government to clear and imminent dangers.

(7) The consequences of a decision are not a function of the margin of disagreement over that decision. A unanimous decision might have trifling consequences: a decision won by a single vote might be catastrophic. Further, unanimity is no guarantee of a good decision or a poor one.

(8) Some arguments appear rigorous and irresistible, but only within a circumscribed area of debate. When the limitations of that area are breached, those arguments might become less potent or even irrelevant.

Conclusion

Folly and poor risk assessment have venerable pedigrees. The destruction of Melos reveals a polity acting against its own best interests, even though it knew the consequences and possessed enough information to make a rational decision. The saving of Mytilene reveals a polity determined to pursue dialogue, partly because it was unwilling to accept that making a decision also entailed the end of discussion.

There is a further point: in 431 BCE, Pericles delivered his famous funeral oration [2.35-46], a panegyric on Athens and its democracy. Democratic debate saved Mytilene a few years later, but a decade thereafter Athens destroyed Melos. There is no reference to any debate over the fate of Melos. Thucydides was well aware of the difference between sprouting ideals and living up to them. He wanted to show how easily those who genuinely accept an ideal can be led to depart from and even deny it.[23] We may cultivate and broadcast an ideal of who we are – rational, civilised people who deal fairly with each other and look after our children – yet act like barbarians. Why, though, are our rational faculties so often overwhelmed by non-rational impulses?

[23] A point explored by Susan Stebbing in *Ideals and Illusions* (London: Watts, 1941) 138-143.

Abstract or demonstrative reasoning, therefore, never influences any of our actions … reason alone can never produce any action, or give rise to volition.[1]

Chapter 6
The Emotional Brain

Introduction

Socrates believed that 'no-one does wrong willingly and that all wrongdoing is involuntary'.[2] In essence this is a belief about knowledge: if I claim to know the right thing to do but instead do the wrong thing, then my claim is false and I acted in ignorance. Plato never departed fully from this belief,[3] but he does think Socrates overlooked non-rational, non-epistemic motivation. In the *Republic*, for example, Plato discusses timocracy – government by those who are ruled by their passions [548] – and oligarchy – government by people ruled by their appetite for money [550-552].

Socrates is our dialogic and rational prototype. We like to think that if we present sound, rational arguments then any opposition should be convinced about the merits of our position. But this is not how dialogue worked for Socrates, nor does it often work that way for us. We know why and how we should address global heating, but appealing to and engaging our rational brain is not enough. We must also engage our emotional brain if we are to act effectively.

Thinking about PAIN

In *Don't Even Think About It* (2014), George Marshall argues that the most important reason for general lack of action on climate change is that most of what we know about it appeals only to our rational brain; the emotional brain remains largely disengaged. Marshall cites evidence such as Joseph LeDoux's landmark *The Emotional Brain* to support his assertion. According to Marshall, the problem concerning inaction to mitigate global heating derives from the trajectory of human evolution. In short, our brains have evolved two distinct

[1] David Hume, *A Treatise of Human Nature*, L. A. Selby-Bigge ed., 2nd ed. P. H. Nidditch (Oxford: Clarendon Press, 1978) 414.

[2] *Gorgias* 509e.

[3] It appears in the *Laws*, for example, which is probably Plato's last work [731c, 860d-864c].

information-processing systems: the rational brain and the emotional brain.[4] The former is analytical and logical, and uses rational constructs like mathematics to describe and interpret the world we inhabit. The latter is driven by our intuitions, experiences and emotions – particularly fear and anxiety. Both systems use language: the rational brain uses language to define and describe, while the emotional brain uses story and narrative to communicate meaning. This binary information-processing system clearly has adaptive value: if it did not then we would probably not be here. Evolution of this system has allowed us to overcome the threats and challenges that might otherwise have terminated our species, and has given us the ability to detect opportunities and use them to our advantage.

A problem arises, however, when this binary system confronts a situation wherein our evolved responses are not adaptive, and may even threaten our survival. Climate change is a paradigm of such a situation. As Daniel Gilbert argues, we are poorly equipped to deal with global heating because our brains have evolved to respond to four key triggers, but climate change fails to activate any of them.[5] The triggers form a convenient acronym – PAIN:

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[4] George Marshall, *Don't Even Think About It* (New York: Bloomsbury, 2014) 48-51. The labels 'rational brain' and 'emotional brain' are Marshall's, but they are more appropriate in this context than, say, 'cognitive brain' and 'affective brain'. It is important to note that this discussion refers only to neurophysiology: it has nothing to do with the ubiquitous but false binary of male reason and female emotion. The difference between our emotional and cognitive brain is a brute fact about every person's neural make-up, whether female or male, and is a fundamental tenet within psychology and neuroscience. As an example, consider a situation in which an adult male is speaking with his authoritarian father. The conversation appears normal, when all of a sudden the son explodes with rage at something his father said. So far as onlookers are concerned, the son is behaving irrationally: the father has said nothing to incite his son's rage. However, they are not aware that something in the conversation – it might be merely a look or intonation – has triggered a powerful past memory, even though it has no bearing on the present conversation. This response has put the son's frontal lobes temporarily 'off-line': the emotional brain has hijacked the rational brain.

[5] Marshall, 46-48; Daniel Gilbert, 'If Only Gay Sex Caused Global Warming', *Los Angeles Times* (2 July 2006); Brian Kateman, 'Evolutionary Psychology of Climate Change' in *State of the Planet* (Earth Institute, Columbia University, 9 January 2012) – an interview with Daniel Gilbert. Gilbert classified the triggers using the acronym PAIN.

Personal: we are highly adapted to think about human agency because social interaction is essential for survival. We are thereby able to identify friends (those who cooperate) and enemies (traitors or people with bad intentions towards us). However, for the most part climate change lacks an identifiable agent, presenting rather as an emergent property of a complex social and economic system.

Abrupt: we respond effectively to sudden changes in our environment, but ineffectively, or not at all, to slow-moving threats. We fail to act on or even detect gradual changes that would generate emergency-level activity if they all occurred at once. Indeed, though we are able to calculate that a certain event was exacerbated by climate change, it is not a phenomenon of which we have personal perceptual experience.

Immoral: climate change does not trigger the moral emotions – such as revulsion, anger, disgrace, or feeling insulted – that usually propel us into action. Every society has taboos that generate outrage if transgressed, such as dumping garbage in somebody's home, but there is no equivalent taboo against dumping GHGs into the atmosphere.

Now: we have an ability to anticipate the future, but this is one of homo sapiens' less developed skills. Ergo, we still give immediate or close threats more weight than distant threats, even when we know that the latter is far more probable and dangerous than the former. For example, I know that climate change is a highly likely existential threat, but I also know it won't kill me tomorrow, whereas I'm not certain that my workplace won't be bombed by terrorists tomorrow, even though that is highly unlikely. Nonetheless, I (and most governments) give more weight to the latter threat than the former.

In short, the character of climate change – lacking an identifiable personal enemy, very slow moving, not repulsive, and chronologically remote – means that we are particularly ill-adapted to deal with it.

Prima facie, though, this observation does not explain much because there are plenty of situations in our world where our adaptive abilities are tested well beyond anything they might have met during our forebears' evolution. For example, most of us have few qualms about entering an enclosed metal and carbon-fibre tube and allowing it to take us 10 kilometres above sea level, yet of course the experience of flying is something for which we

have no evolved adaptation. However, our prima facie observations are wrong: our brains are well adapted for flying because it activates at least two of Gilbert's four triggers. Flying is an immediate and deadly threat, and the changes we experience – in temperature, sound and so on – are extremely rapid. In other words, we perceive (very appropriately) that flying is exceptionally dangerous, and therefore take extravagant measures to ensure our safety. This is probably the main reason flying is much safer than driving. The latter does not activate our adaptive brain mechanisms nearly so much as flying, so we are lulled into a false (and sometimes deadly) sense of security. The parallel with climate change is clear. With regard to adaptation, global heating is much more like driving than flying, except that global heating fails even to activate any of the triggers that occasionally make us drive defensively.

Climate change: a perfect threat

In summary, climate change comprises an almost perfect threat to human beings in that, while our rational brain can understand and analyse it, our emotional brain remains largely disengaged. Why, though, does the emotional brain seem to override the influence of the rational brain? Why can't we rationalise our way into effective action? The short answer is that we can, and often do, act on rational apprehension of a situation. This is why people will rally for causes, such as greater funding for scientific research, that do not necessarily engage them emotionally but which they rationally understand to be important. However, these causes are rarely the subject of emotive public debate. If I attend a rally to support science, I am not likely to encounter a rival rally against increased funding for scientific research, even though a small portion of the public probably believes funding should be cut. Moreover, there are unlikely to be many people at such a rally – there were fewer than one in 500 of the population at the rally I attended – even though most of the population would agree with its aims.

What about issues that are the subject of emotive public debate, such as whether to recognise marriage by same-sex couples? The mere fact that an issue is debated usually entails our emotional engagement. Even though some of the debate will be conducted by rational argument, much of it will appeal to our emotional brain through story and narrative. Climate change is also an issue of public debate, so surely debate about it will be conducted in much the same manner as that over same-sex marriage. Again, however, the problem centres on our emotional investment in the respective issues. For example, in Australia more people attended rallies in support of same-sex marriage (and rallies against it) than attended

rallies in support of action on climate change. From the above, we now know why: unlike global heating, the issue of same-sex marriage activates several and perhaps all of our adaptive emotional triggers. For example, it identifies friends, enemies and human agency; on both sides it triggers moral disgust; it is an immediate threat to one side, while its denial is an immediate threat to the other; and it is affectively current, not future.

Important as it is, though, same-sex marriage is much less significant than climate change to the survival of human beings. However, even though we understand the implications of that comparison, why do we usually fail to act accordingly? Part of the answer can be found in Joseph LeDoux's study on neurobiology. He notes that in mammals the neural connections from the amygdala (a primitive part of our brain in evolutionary terms) to the cortex (a more highly evolved part of the brain, which in humans is responsible for information processing such as thinking and reasoning) are considerably more than from the cortex to the amygdala. This means that the amygdala has greater influence on the cortex than vice-versa.[6] The adaptive advantage of this arrangement is clear. The amygdala is like a hub in the wheel of our fears.[7] If, for example, I am walking along a bush track and I see a snake, my thalamus passes 'crude' visual information to my amygdala and sends more detailed information to my visual cortex. The latter proceeds to develop an accurate perception of the object – Is it a snake or a curved stick? If it is a snake, is it dangerous? – but my immediate response is motivated by my amygdala. This is because information via the cortex takes longer to reach the amygdala. If, instead of my immediate response – jumping back out of range of snake bite – my reaction waited until my cortex had processed the visual information, I would not always react quickly enough to avoid danger.[8] The potential ancestor who failed to respond immediately was thereby less likely to pass on his or her genes.

However, our well-adapted response to immediate danger is poorly adapted to a threat like climate change. But why would our inherited ability to react mere fractions of a second quicker in response to danger be so deficient in confronting global heating? After all, a reaction time measured in seconds is entirely irrelevant to long-term changes in climate. The

[6] Joseph LeDoux, *The Emotional Brain* (London: Phoenix, 1999) 284-303.

[7] LeDoux's apposite metaphor, 170.

[8] LeDoux, 166.

answer lies in the above-mentioned imbalance of pathways between the amygdala and the cortex. The greater connectivity of amygdala to cortex than cortex to amygdala means that connections from our emotional systems to our cognitive systems are stronger than the other way around.[9] This entails that, while our emotions can overwhelm our consciousness, we have little conscious control over our emotions.[10] Moreover, our single system of consciousness can be occupied by ordinary activities and matters of fact or by highly charged emotions, and the latter can much more easily knock the former out of our awareness than vice-versa. In short, emotional arousal dominates our thinking. Moreover, even though thoughts can easily trigger emotions – by activating the amygdala – we are not adept at consciously switching off our emotions – by deactivating the amygdala.[11]

As Jaak Panksepp and Lucy Biven found, attempting to make a reasonable decision about an affectively loaded matter is easier when emotional arousal is comparatively low. In our frontal lobes, the lateral (cognitive) regions are in fluctuating balance with the medial (emotional) regions. If you perceive an event affectively, the medial areas are more aroused than the lateral. If you perceive the same event more cognitively and less emotionally, the imbalance is reversed: the lateral areas are more activated than the medial. Panksepp and Biven conclude that feelings are very important when choices are to be made, but also that strong emotions and rationality do not work well together.[12] They also found that our core values – manifest in the affective lives that lead us to treasure or detest the various phenomena in our world – arise substantially from evolved emotions concentrated in the medial subcortical regions of the brain.[13]

With regard to debate about climate change, some of the reasons for our inactivity are now apparent. The issue of global heating does not sufficiently activate our emotional triggers, whereas activation is much easier for those who are opposed to action. This is

[9] Note that neural pathways are *not* like telephone lines: they operate in one direction only.

[10] LeDoux, 17-20.

[11] LeDoux, 303.

[12] Jaak Panksepp and Lucy Biven, *The Archaeology of Mind* (New York: W. W. Norton, 2012) 416-417. Panksepp and Biven are pioneers in the new discipline of Affective Neuroscience (AN). Unlike traditional neuroscience, AN sheds light on how our most powerful emotional feelings – raw primal affects – arise fully developed from the ancient neural network situated below the neocortex.

[13] Ibid. 480.

largely because our perceptions of risk are dominated by the emotional brain.[14] Therefore, if we are comparing risks then the risk that is more proximate, that draws on our personal experience and speaks to us in stories, is the one that will dominate our decision-making. Ergo, if the perceived risk in mitigating climate change includes threats to our current way of life (proximate in both time and space) and requires activities of which we have little experience, and if its narrative (largely set in the future) is much less emotive and available than the narratives by which we currently live (such as 'fossil fuel has made us mobile and wealthy'), then those narratives will dominate our thinking.

Moreover, our perception of that risk is very stable. Even if we endeavour to diminish the dominance of our emotional brain by constant attention to the facts of, and predictions about, climate change, we are unlikely to succeed. Indeed, this endeavour would not be very different from trying to overcome anxiety or depression by 'rationalising' them away, and would achieve just as little success.

With respect to climate change, if the problems created by our rational and emotional brains were not confounding enough, they are exacerbated by the fact that emotions are primarily non-conscious processes.[15] For example, we frequently have non-conscious 'gut reactions' to things or situations, but remain oblivious to the profound impact these reactions have on our decision-making processes. Moreover, emotion also acts as a value system that appraises the significance of stimuli. We become aware of something being meaningful when it rises from this system into consciousness. As Daniel Siegel states, emotions create meaning in our lives, whether we are aware of those emotions or not.[16] All of this entails that

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[14] Marshall, 49. The American Psychological Association addresses these matters in *Psychology & Global Climate Change: addressing a multifaceted phenomenon and set of challenges,* A Report of the American Psychological Association Task Force on the Interface Between Psychology and Global Climate Change, Janet Swim, Chair (2009). The relevant sections are '(Not) Feeling at Risk', 'Discounting the Future and the Remote', and 'The Role of Culture in Climate Change Understanding and Reactions', 23-26.

[15] As Arthur Schopenhauer put it (long before Freud), 'The whole process of thought and decision seldom lies on the surface, i.e., seldom consists in a concatenation of distinctly thought-out judgements … Consciousness is the mere surface of our mind, of which, as of the earthly globe, we do not know the interior, but only the crust.' [*The World as Will and Presentation,* vol. 2, Richard E. Aquila and David Carus trans. (New York: Pearson Longman, 2008) 154].

[16] Daniel J. Siegel, *The Developing Mind,* 2nd ed. (New York: Guildford Press, 2012) 157-161.

the dominant part of our brain in terms of how we perceive, react and give meaning to the world is itself largely beyond our awareness, let alone our control. It follows that we are unlikely to do anything about global heating until it becomes a proximate threat, by which time any response might be too little and too late. To put it crudely, we are applying to climate change the neurobiological tools that human beings have evolved to cope with ancient challenges, and these tools have so far proved inadequate to deal with the new threat.

Summary

Debate over whether and how to address climate change has generally assumed that the winner will be the side with the best data and evidence. This assumption is misleading: rather, the winner is more likely to be the side which engages our emotional brain, and so far that is the side advocating little or no action. To win, the side supporting active mitigation must shape its arguments through narratives and activities that trigger appropriate emotional responses.

Methodological individualism

There is a further matter that confronts this debate. So far we have assumed that information about psychological states within individuals can be extrapolated to, and can therefore explain the attitudes and actions of, social groups. This is methodological individualism (MI), and at first glance the above appeal to neurobiology will suffer from the same shortcomings as MI. Criticism of MI has a long heritage. Probably the most well-known and concise criticism is that of Karl Marx:

> It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness.[17]

Emile Durkheim is similarly critical:

[17] Karl Marx, *A Contribution to the Critique of Political Economy*, S. W. Ryazanskaya trans. (Moscow: Progress Publishers, 1970) 21.

> Every time a social phenomenon is directly explained by a psychological phenomenon, we may be sure that the explanation is false.[18]

Despite these confident denunciations, the concept of MI is difficult to grasp. For example, Steven Lukes accurately defines MI as the view that 'facts about society and social phenomena are to be explained solely in terms of facts about individuals'.[19] As an example, he quotes Karl Popper's assertion that:

> all social phenomena, and especially the functioning of all social institutions, should always be understood as resulting from the decisions, actions, attitudes, etc., of human individuals, and that we should never be satisfied by an explanation in terms of so-called 'collectives' (states, nations, races, etc.).[20]

However, Lukes then fails to add that Popper concomitantly rejects psychologism – in this context, the view that social facts are ultimately reducible to psychological facts about human beings – because Popper recognises that individual psychology is often inadequate to explain a situation. For example, if someone is looking to buy a house we may safely assume she does not want to raise the market price of houses. However, the mere fact she has entered the market as a prospective purchaser, and thereby potentially increases demand, means that prices are more likely to rise. In other words, her (psychological) intent produced an outcome that was entirely unintended.[21] In this situation, the social fact – higher prices – cannot in any meaningful way be reduced to individual psychology. Indeed, a property owner might well enter the market as a buyer *because* she wants house prices to rise. In this situation, according to psychologism the one social fact could equally be explained by either of diametrically opposed psychological facts – an explanation that fails to explain anything.

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[18] Emile Durkheim, *The Rules of Sociological Method*, Sarah A. Solovay & John H. Mueller trans. (New York: The Free Press, 1964) 104.

[19] Steven Lukes, 'Methodological Individualism Reconsidered' in *The Philosophy of Social Explanation*, Alan Ryan ed. (Oxford: Oxford University Press, 1973) 121.

[20] K. R. Popper, *The Open Society and Its Enemies*, vol II, 4th ed. (London: Routledge & Kegan Paul, 1962) 98.

[21] Ibid., 96.

Popper further argues that a person's actions are to a large degree explicable in terms of the role she plays in the situation in which they occur, but not fully explicable.[22] For example, when we refer to 'irrational behaviour' we usually mean behaviour which is irrational according to the logic of a given situation. Moreover, if we attempt to explain such behaviour by examining an individual's motives then we inevitably employ psychological analyses that presuppose a socially constructed standard of rational behaviour in a given situation. In other words, the criteria by which we identify and assess individual motives are themselves unavoidably an expression of social interaction. We can, then, make sense of a person's actions by discovering he is (say) a soldier, but will largely fail to explain his behaviour unless we understand how an army works. Moreover, when we explain how the soldier fulfils his role it is highly unlikely that we will invoke no psychological criteria. As Alan Ryan states, despite their label, most proponents of MI appear to occupy a methodological half-way house, even though this may not seem 'an attractive resting place'.[23] Ryan, like Lukes, considers it perfectly clear that observable social phenomena do exist – for example, procedures in a court of law – but that does not preclude the view that social explanations inevitably rely on psychological assumptions. In practice, then, the half-way-house approach appears to be a satisfactory default position from which to analyse human activity.

Interpersonal neurobiology

The point of the above is to address the long-held scientistic 'ambition to reduce sociology to psychology and psychology to physiology, this paving the way for a complete reduction of the social sciences to the physical sciences'.[24] This is an ambition from which recent neurobiology is singularly free. For example, Daniel Siegel's interdisciplinary research is based on a broadly developed and agreed working definition of the mind as:

> an embodied and relational process that regulates the flow of energy and information within the brain and between brains. … To put it simply, human connections shape

[22] Ibid, 97.

[23] Alan Ryan, 'Introduction' in *Philosophy of Social Explanation*, 10-11.

[24] Ibid. 3.

> neural connections, and each contributes to mind. Relationships and neural linkages together shape the mind.[25]

This definition is fundamentally different from the concept of a person – essentially a mind in a body – expressed by Cartesian dualism. Indeed, Siegel refers to his research as interpersonal neurobiology. Within mainstream psychology, Cartesian dualism is expressed by the split between behaviour and experience. The former comprises a person's physical and verbal behaviour; the latter comprises the private, inner world of a person's thoughts, emotions and so on. Behaviour is observable and therefore quantifiable, and its characteristics can be agreed upon by other observers. Experience is inaccessible to observers and therefore a person's mental state has to be inferred from their behaviour. With regard to the debate over climate change, the assumptions of Cartesian dualism are clear: if an individual fails to enact (say) some sort of mitigation strategy then we infer either an epistemic failure – the person does not know what to do – or a moral failure – the person knows what to do but could not be bothered doing it, or actively won't do it. We do not normally infer an emotional failure or incapacity, either individually or (much less) collectively.

Within the paradigm of interpersonal neurobiology, however, a person's emotional incapacity with regard to global heating might have little or nothing to do with personal development and everything to do with absence of an affective narrative among the other people who co-constitute that person's world. In this regard, interpersonal neurobiology has inherited the philosophical trajectory of existential-phenomenological psychology, within which a person and her world comprise an indissoluble interrelationship. The individual and her world co-constitute each other: there is no meaningful sense in which one can be abstracted from the other. In other words, the individual is 'located' and it is impossible to consider that person apart from her context. Moreover, it is through the individual's locatedness that the meaning of her world emerges. This meaning is not fixed; the meaning of an individual's life, and the meaning of her world, are in constant dialogue with each

[25] Siegel, 3.

other.[26] This entails that a person's thoughts and actions are continuous dialogic exercises in gleaning meaning from and imparting meaning to her situation. This situated freedom and obligation underlies our meaning-making interactions with other people**.**

Within this schema the importance of an appropriate narrative is clear. If, for example, we replaced our standard narratives about resource exploitation and limitless growth with a discourse of ecological democracy then our meaning-making interactions with each other and with our environment would be fundamentally transformed.[27]

Conclusion

We know what climate change is, we know what to do about it, and we know the consequences of not acting. However, in and of itself knowledge does not motivate us to act: the rational brain is engaged, but motivation to act derives largely from the emotional brain. This is clearly not a matter of epistemic failure, nor even of moral failure: most people have a genuine desire to address global heating, but motivation is missing from our political and social discourse. Within the politics of climate change, this has diminished the role of knowledge to little more than a rational bystander.

There is a further matter: climate change is a global phenomenon and therefore requires a global solution. Prima facie, this suggests that science and rationality are appropriate avenues by which to address the problem because they are universal. However, this appeal concomitantly undermines their effectiveness as agents of change insofar as they neglect the emotive narratives which can inspire us to act. This is because the most effective, and affective, narratives are more often local than universal. Science and rationality are therefore hamstrung by a contradiction: their inherent strength – the ability to supply universal criteria

[26] Ronald S. Valle, Mark King and Steen Halling, 'An Introduction to Existential-Phenomenological Thought in Psychology' in *Existential-Phenomenological Perspectives in Psychology*, Ronald S. Valle and Steen Halling eds (New York: Plenum Press, 1989) 4-8.

[27] 'Ecological democracy' is the preferred category of discourse advocated by John Dryzek. One of its most important characteristics is to structure decision-making such that it listens to the non-human world, intentionally blurring the boundaries between social systems and natural systems [*The Politics of the Earth* (Oxford: Oxford University Press, 1997) 200-201].

for understanding the world – makes them less likely to supply the localised narratives that motivate us to save it.

There are, however, narratives that could be regarded as both universal and local: narratives that have claims to universality, yet whose appeal is mainly local in that they are defining elements of group identity. The next chapter discusses one such narrative – the Parousia, or second-coming of Christ.

Child ant: Why do they make so many disaster movies, dad?

Father ant: So when Armageddon comes we can go back to bed and say, 'I've seen it already'. [*B.C.* by Johnny Hart]

The egoism which enters into our theories does not affect their sincerity; rather, the more our egoism is satisfied, the more robust is our belief.[1]

Chapter 7

The Parousia[2] – worth waiting for?

Overview

In the United States, most evangelical Christians deny the existence of climate change *and* voted for Donald Trump in 2016. The latter seems highly unlikely because the president's character and habits are the antithesis of evangelical standards. This phenomenon has little to do with rationality or emotion and more to do with group identity. The following is a hermeneutic exercise in which social identity theory is used to interpret early Christian texts and thereby illuminate the puzzling connection between a playboy president and people who once comprised the core of the 'moral majority'.

Introduction

Our emotional brains can, at least to some degree, explain why people make decisions that defy logic and common sense, but what about social phenomena for which appeals to the emotional brain seem, and probably are, inadequate? For example, Noam Chomsky laments that:

> one of the difficulties in arousing American concern about global warming is that some 40 percent of the country's population believes that Jesus Christ will probably or definitely return to Earth by 2050, so they do not see the very severe threats of climate disaster in future decades as a problem.[3]

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[1] George Eliot (Mary Ann Evans), *Middlemarch*, ch. 53.

[2] The Parousia (from the Greek *parousia* – presence, arrival) refers to the 'second coming' of Christ.

[3] Noam Chomsky, *Who Rules the World?* (London: Penguin Books, 2017) 264. Chomsky's information comes from 'Jesus Christ's Return to Earth', Pew Research Centre (14 July 2010). This survey showed that

Chomsky further notes that a similar percentage of Americans are creationists – people who believe that God created our planet and its modern human inhabitants within the last 10,000 years.[4] Chomsky has correctly identified two significant, and often linked, tenets of Christian fundamentalism: belief in the Parousia, and subordination of mainstream scientific knowledge to the authority of scripture. However, Chomsky makes a further statement that, at first glance, sits oddly with these beliefs: 'Americans are pretty close to the international norm in their concern for global warming'.[5] Chomsky's assertion is nearly correct. For example, 39 percent of American adults regard climate change as a minor or no threat. By comparison, the percentage for Sweden was 30; Canada, 34; Australia, 38; Russia, 51; Israel, 58; the median was 29. From 2013 to 2018, the number of adults who perceived climate change as a major threat rose by 19 percent in the United States, compared to 12 in Canada, 15 in Germany, and 18 in the UK.[6] It is evident that, though America is trailing global opinion, the gap is not significant and is closing. But why is America anywhere near the norm when so many of its citizens believe that God is going to intervene dramatically and decisively in world history within the next three decades?

Theo-logic

There are several straightforward explanations for this anomaly. For example, belief in an imminent Parousia is consistent with accepting climate change as fact. Indeed, many fundamentalists believe that Christ's return will be preceded by, and also bring an end to, any number of global calamities. Within this apocalyptic construal, catastrophic global heating could be regarded as a harbinger of divine intervention. Nor is there a necessary contradiction in believing that future generations will be harmed by climate change. If one's primary belief about the second coming is that believers will be gathered to heaven – usually known as the Rapture – then those left behind, who would probably include friends and

41% of Americans believe that Christ will definitely (23%) or probably (18%) return to Earth by 2050. For white evangelical Christians the figure is 58%. These results are consistent with church history. As Ernest Best noted, 'where belief in the Parousia has been strong it has almost always been accompanied by an expectation of its immediacy' [*A Commentary on The First and Second Epistles to the Thessalonians* (London: Adam and Charles Black, 1979) 360].

[4] See, for example, Frank Newport, 'In U.S., 42% Believe Creationist View of Human Origins', *Gallop News* (2 June 2014).

[5] Chomsky, 130.

[6] Pew Research Center, 'A look at how people around the world view climate change' (18 April 2019).

family of raptured believers, will still have to confront global heating, though that might be the least of their worries. On the other hand, even if your belief is that Christ will, upon his return, immediately establish a millenarian kingdom on a transformed Earth, a couple of generations or more might, until that event, have to endure the travails of global heating. Chomsky is probably right, though, in thinking that belief in an imminent Parousia is probably not going to inspire many people's most vigorous efforts to mitigate carbon emissions.[7]

Only within a very circumscribed area of discourse – millenarian theology – does any of this make sense, but it fails to explain why (for example) only 9 percent of black protestants supported Trump in 2020, compared to nearly 80 percent of white evangelicals.[8] Given that differences in eschatological belief between black protestants (a group which includes black evangelicals) and white evangelicals are minimal, any answer to this question must be informed by social psychology.[9] An area of social psychology that has proved fruitful when investigating millenarian movements is social identity theory (SIT).[10]

Social identity theory (SIT)

At the heart of SIT is the question, 'Who do we, as a group, say we are?'. Members of almost any group will either ask themselves that question or, more likely, assume they know

[7] 'Probably' but not invariably right. For example, in the late 1970s I was a member of an environmental group, some of whose members believed in an imminent Rapture. In other words, their belief that the present world would end soon did not dampen their enthusiasm to preserve it.

[8] Pew Research Center, 'White Christians continue to favor Trump over Biden, but support has slipped' (13 October 2020) and Tom Gjelten, '2020 Faith Vote Reflects 2016 Patterns', National Public Radio (8 November 2020). Note that only one in four black protestants identify as evangelical, mainly because of the label's racial connotation [Pew Research Center, '5 facts about the religious lives of African Americans' (7 February 2018)].

[9] Eschatology is discourse about the last days (from the Greek *eschatos*, 'last').

[10] For an overview of social identity theory see Rupert Brown, 'Intergroup Relations' in *Introduction to Social Psychology*, Miles Hewstone et al. eds (Oxford: Basil Blackwell, 1988) 381-410. For its application to a New Testament millenarian movement see Philip F. Esler, '1 Thessalonians' and '2 Thessalonians' in *The Oxford Bible Commentary*, John Barton and John Muddiman eds (Oxford: Oxford University Press, 2001) 1199-1219. For the application of broader social science theory to early Christian and 2nd century BCE to 1st century CE Jewish documents, see Esler, *The First Christians in their Social Worlds: Social-scientific approaches to New Testament interpretation* (London: Routledge, 1994).

the answer. A significant part of the answer concerns people's need for a positive self-concept.[11] But how does this help to explain the vast overrepresentation of white evangelicals in the broader group of Christians who believe in an imminent Parousia?

The first clue to an answer lies in another point Chomsky noted. The Republican Party's devotion to America's wealthy elite has become so extreme that its policies now have little appeal to the broader community.[12] Instead, it has attempted to attract voters by appealing to social groups whose identities and characteristics make them exploitable fodder in America's recent and current political climate. With this in mind, SIT suggests that such groups will exhibit the following general characteristics. They will:

(1) perceive themselves as subordinate or minority groups rather than as mainstream and dominant;

(2) provide members with appropriate social interpretations and ideologies;

(3) furnish members with the memories, narratives and stereotypes that will maintain and protect their positive self-concept;

(4) have, and maintain, a clear position on salient issues and be very consistent in defending and advocating for that position;

(5) feel that out-groups tend to ridicule them;

(6) tend to 'lash out' at other groups in proportion to their view that, in the hierarchy of status and power, their position is insecure;

(7) tend to maximise differences from out-groups, even if that involves an overall cost to the group;

(8) perceive themselves as more homogenous than out-groups;

(9) regard the social status hierarchy to be unfair but also flexible – that is, they will have the view that there are ways out of their current malaise and that they are not doomed to inhabit a perpetual underclass.

[11] Matthew Hornsey notes that this need is fundamental to SIT ['Social Identity Theory and Self-categorization Theory: A Historical Review', *Social and Personality Psychology Compass*, 2/1 (2008) 214].

[12] Chomsky, 265.

More specifically, with reference to millenarian characteristics, these groups will exhibit the following:

(i) their millenarian ideology will provide a narrative of the past and future;

(ii) their orientation towards the future will provide a powerful cognitive sense of belonging and a concomitant sharp distinction between in-group members and out-groups;

(iii) their futurist mythology will emphasise the destination rather than the basis of the current social order;

(iv) their millenarian ideology will reinforce their social identity whenever they feel under threat from external agencies;

(v) they will perceive confronting events as controlled by divine forces.[13]

How, though, does the application of SIT, or indeed any other social-scientific model, better enable us to understand how a group works? After all, might not this method be an exercise in Procrustean imposition, forcing a possibly inappropriate model onto a social situation and thereby deluding us into thinking we understand it? Part of the answer is to realise that we inescapably impose social models on all situations we choose to investigate. Those models might be unacknowledged and unconsciously applied, but they are applied nonetheless.[14] For example, if we want to analyse a late first century Christian community in terms of status, family, gender or religious purity, we will usually apply (consciously or not) interpretative models derived from modern experience, but those models may lead us to analyses that are not only ethnocentric and anachronistic but also ideologically gullible. The point is to be aware of the models we use and, so far as we are able, to choose the most suitable exemplars. But how do we know which models are more suitable? Why should I choose a model based on SIT rather than, say, the structural anthropology of Claude Lévi-Strauss? Hermeneutics provides one answer: insofar as SIT facilitates our understanding of

[13] This schedule of characteristics has been developed from Esler (2001) and Brown – see footnote 10 above; Eddy Van Avermaet, 'Social Influences in Small Groups' in *Introduction to Social Psychology*, 359-360; and Hornsey, 206-215.

[14] Esler (1995) 4-8. Esler regards this argument as 'irrefutable'. My sole reservation is that conscious application of a model clearly implies a level of intention, and concomitant directedness, that is absent from unconscious application.

American evangelicals, it might also illuminate an ancient horizon which is fundamental to that group's identity – primitive Christian eschatology.

A landmark example is Philip Esler's application of SIT to his own investigation of *1 Thessalonians*, an epistle from the apostle Paul to the early Christian church in Thessalonica (now in modern Greece). This letter was written in about 50 CE and is very likely the oldest extant Christian document. It is important because it reflects the concerns of a church at a primitive stage in the development of Christianity. One of the most important of those concerns was a perceived delay in the Parousia. Like first-century Judaism from which it was an offshoot, early Christianity was eschatological.[15] It followed standard Jewish belief that God would soon intervene to bring the current world order to an end and establish a new and better world. Christianity's main eschatological difference from Judaism was its belief that Jesus would descend from heaven to establish the new kingdom. The earliest Christians expected the Parousia within their lifetime – Paul himself was clearly of that view – but some members of the Thessalonian church had died, obviously predeceasing Christ's millenarian appearance. Their surviving brethren were concerned about the status of these deceased believers. Would they now not participate in the Parousia? Would they miss out on sharing in God's new kingdom? Were they already in heaven? In one of the more remarkable, and ultimately influential, passages in the New Testament (*1 Thessalonians* 4.13-18) Paul allayed the church's fears. Far from being overlooked when Christ descends from heaven, these deceased believers 'shall rise first. Then we who are alive, who are left, shall together with them be caught up in the clouds to meet the Lord in the air'.

When we apply SIT to *1 Thessalonians* the characteristics of this church are easy to recognise. First, the church's orientation towards the future provides members with a robust sense of belonging to a distinct group. Members identify themselves with reference to a specific and common future destiny. Even though most of the congregation would have shared a common past, that narrative is largely irrelevant to their current identity, except insofar as it had been superseded. This is important because Paul states that the Thessalonians had 'turned to God from idols' (1.9). Members had in effect discarded their

[15] For an overview of Jewish eschatology see E. P. Sanders, *Judaism: Practice and Belief 63BCE – 66CE* (London: SCM Press, 1992) 279-303, and for early Christian eschatology see his *Paul: The Apostle's Life, Letters, and Thought* (Minneapolis: Fortress Press, 2015) 207-214.

social pasts by rejecting the civic cults of their city. These cults and their various ceremonies and festivals were at the heart of a city's social life and cultural activities.[16] By holding themselves aloof from these events, Christians (and Jews) were often accused of misanthropy and impiety, the latter charge because they eschewed the religions that underpinned and were an intrinsic part of economic and social order. Acccordingly, early Christians often suffered the odium of being perceived as subversive. It is not surprising to read that the Thessalonian church endured 'tribulation' (1.6). Its members comprised a minority fringe group. The church was regarded with suspicion and hostility because it maintained views that were alleged to, and possibly did, threaten tradition and stability.

Further, the group possessed a specific epistemic identity. Members received, shared and disseminated a discrete body of knowledge; nobody could be a member of the church unless she or he imbibed that knowledge. With reference to the issue of deceased believers, it is noteworthy that Paul imparted knowledge to the church not merely to inform members but also that members 'may not grieve as others do who have no hope' (4.13). Whether these 'others' (*hoi loipoi*) were pagans (most likely) or perhaps Jews and/or non-Pauline Christians is largely irrelevant. Paul employs a common binary stereotype to reinforce his distinction between the Thessalonian in-group and everybody else (the out-groups). One of the salient attributes by which Paul characterises the Thessalonians is their possession of 'steadfast hope' (1.3) in contrast to out-groups who lack hope. In short, the in-group has hope because it possesses the requisite God-given knowledge, while out-groups lack this knowledge and therefore lack hope. It is notable that, in his excellent commentary on the Thessalonian epistles, Ernest Best argues that Paul was wrong to assert that the rest of humankind has no hope whatsoever given that 'many philosophers had taught that the soul was immortal'.[17] Best's contention is largely correct, but misses the point. The overriding purpose of Paul's stereotype is to strengthen in-group identity. The stereotype works by establishing a salient contrast with out-groups, not by providing a coherent, fair or accurate depiction of those out-groups.

[16] Ramsay MacMullen, *Paganism in the Roman Empire* (New Haven: Yale University Press, 1981) 34-42.

[17] Best, 185-186.

Climate change denial – a core political belief

This stereotyping also works in reverse. For example, many of President Trump's evangelical supporters identify themselves, at least in part, as climate change deniers. Again, this is much more a matter of group identification than careful weighing of relevant arguments. If some of the groups which oppose Trump are also those that support strategies to mitigate global heating, then almost by definition Trump supporters will oppose mitigation. Moreover, this opposition will almost inevitably manifest itself as denial of climate change, even though it does not necessarily follow that if you oppose mitigation then you must also deny global heating. For instance, Bjørn Lomborg accepts the fact of global heating (though understating its effects) while concomitantly asserting that substantial reductions in carbon emissions would not be wise.[18] For evangelicals, the problem with Lomborg's position is that, for the purposes of group self-identity, it strays too far into the opposition camp. If you define yourself, and your group, by rejecting a specified position, then it is largely self-defeating to accept the premises of that position. In order to maintain a consistent self-perception you also have to reject those premises, or at least most of them. With respect to global heating, if you accept, say, the IPCC's evidence, then it seems inconsistent, even churlish, not to accept the substance of its conclusions. Further, in accepting the evidence but denying what it entails you appear to be engaging in greyer, less socially distinct, views or arguments, which is antithetical to solid group identity. Indeed, it is probably the least effective position of all because it appears irrational and insincere to both in- and out-groups. With this in mind it is not surprising to find that, of 16 candidates for the Republican party's presidential nomination in 2016, most (10) either denied the climate was changing at all or denied that human activity had anything to do with it. Many fewer (four) accepted the fact of anthropogenic climate change, though with the provision that the United States should not unilaterally curb its carbon emissions.[19] In short, rejection of the science behind global heating has in America become a core political belief that defines who you are.

[18] Bjørn Lomborg, *The Skeptical Environmentalist* (Cambridge: Cambridge University Press, 2001) 317 ff.

[19] Lest readers think I have chosen a particularly obtuse cohort it is worth noting a 2014 poll which found that, out of 278 Republican members of Congress, only eight believed in anthropogenic climate change [Julie Kliegman, 'Jerry Brown says, "virtually no Republican in Washington accepts climate change science"', *Politifact* (18 May 2014)].

It is largely due to the Thessalonian epistles that American evangelicals believe the second coming will mark the triumph of Christ over Satan. They believe that the present world is dominated by evil forces which are pre-conditions for revealing 'the man of lawlessness, the son of destruction' predicted in *2 Thessalonians* 2.3. Based on these beliefs, evangelicals may find themselves in a curious win-win situation during the presidency of Donald Trump. If the president turns out to be lawless and self-destructive, then evangelicals might regard him as a sign of the long-awaited and now imminent end-time. On the other hand, if the president's policies turn out to benefit evangelicals, then they will feel justified in their political support for him. Either way, during or shortly after the Trump presidency evangelicals might find themselves more comfortably off spiritually or materially and perhaps both.

Hermeneutics and fusing ancient and modern horizons

What, though, about the basic problem of re-interpreting a passage of scripture to address a modern social context that is so utterly different from first century Thessalonica? One important, and rarely enunciated, response to this criticism is that this hermeneutic manoeuvre is both unavoidable and given an imprimatur within the New Testament itself. If we consider the Parousia, *2 Thessalonians* 2.1-12 is itself a substantial reinterpretation of this doctrine's first expression in *1 Thessalonians*. As we have noted, in the first epistle Paul states that the end-time will come suddenly and unexpectedly. In *2 Thessalonians*, however, the writer – probably not Paul[20] – states that the return of Christ will be preceded by certain identifiable events, such as the appearance of the above-noted man of lawlessness. In other words, a later writer is addressing the Thessalonian church by passing himself off as Paul, and is substantially re-interpreting the apostle's original message for a congregation that is just one generation (perhaps two) later than the initial recipients. The point is that from Christianity's beginning there was never a time when the church did not re-interpret scripture anew in order to address the always changing environments in which Christian groups arose. In this sense, American evangelicals are following a long and inescapable tradition of endeavouring to apply scripture to their own context. It is from our present situation that we survey the horizon of the past, the horizon from which we have come and which is present to us in the form of tradition, and which, as Hans-Georg Gadamer argues, is itself always in

[20] For a brief account of this epistle's authorship see Bart D. Ehrman, *Forged* (New York: HarperOne, 2011) 106-108.

motion.[21] This implies that, from anyone's perspective, the meaning of scripture is constantly changing and must always address us anew.

What happens, however, when, instead of 'transposing ourselves' (as Gadamer put it) – opening ourselves to the possibility that our engagement with the changing horizon of scripture will overcome our own particularity – we narrow our horizons such that scripture not only says what we think it should say but also displaces our capacity for critical engagement within our own horizons? This has happened all too frequently throughout Christian history, but in recent decades the Parousia has become a notorious example. The reasons for this are not difficult to uncover. In 1970, at the height of the Cold War and in the midst of widespread international strife, and coinciding with an upsurge of environmental awareness, Hal Lindsey published *The Late Great Planet Earth*. It became the biggest selling book in English during the 1970s (excepting the Bible itself).[22] Lindsey predicted that Christ would return very soon because modern Israel had been founded in 1948 (its rebirth was regarded as a sign that the end would arrive within a generation) and the world was perceived to be on the brink of catastrophe. Of course, all of Lindsey's predictions were wrong, but the millenarian zeal his book, and others in that popular genre, inspired has never abated. The Cold War ended with a whimper, and it is now about two generations since the rebirth of Israel, but fundamentalists still insist that the only dénouement for the trajectory of contemporary political and social ills is Christ's return. Again, SIT helps to explain why. The doctrine of an imminent Parousia provides evangelicals with the following: a powerful myth which interprets and resolves perceived social and political malaise; a doctrine that supplies the ultimate distinction between in- and out-groups – those who are gathered by God and those who are left behind; and a narrative about and orientation towards the future that reinforce social identity and in-group cohesiveness. In short, the Parousia is a paradigm myth for a group that is looking for salvation from the current social order.

Moreover, the Parousia myth is congruent with the view that evangelicals alone pursue and know the truth. Consequently, if your in-group has a powerful cognitive sense and identity of possessing the truth, then out-groups are (by definition) wrong. A problem arises, however, when one's legitimate and authentic pursuit of truth leads to a conclusion that

[21] Gadamer, *Truth and Method*, 304-305.

[22] Ehrman, 105. I reluctantly admit to having contributed to its staggering sales success.

simply cannot be accommodated within the evangelical fold.[23] In this case the person involved will most probably have to leave the group, because little or no leeway can be afforded in a group whose existence depends on maintaining its difference from out-groups, a difference that (in part) is propelled by its futurist mythology.

SIT and contemporary American politics

In the 2016 presidential election, evangelical support was decisive in electing Donald Trump. Prima facie this is anomalous given that, compared with all post-WWII presidents, let alone 2016 nominees from either party, Trump was patently the least 'Christian' (in any broadly observed sense of that term) and certainly the least appealing to evangelicals.[24] However, these apparent deficits counted for little to nothing, and SIT helps to explain why. If we consider the general characteristics of a social group that identifies itself as in some way disadvantaged and marginalized, the following are salient with reference to evangelicals, particularly white evangelicals, and the 2016 election. To begin, many evangelicals have come to see themselves as marginalized because 'traditional' American industries and occupations have declined or vanished. They regard free trade agreements as responsible for ruining their livelihoods and as having much less to do with free trade and much more to do with facilitating the activities of private corporations. They are probably right. They also note that their parlous financial situation is then condescendingly denied by those in government or business who profit most from such agreements.

Further, politics is perceived to be dominated by corporate lobby groups (again, they are probably right), liberal privilege and ethnic minorities. Lobby groups are seen to both serve and corrupt ever more remote and alien financial and political elites. Minority groups are perceived to be usurping traditional social and political arenas. Liberals are seen as purveyors of secular humanism, relativism and, in the form of climate change mitigation, anti-American values. In part, evangelical identity is constructed in opposition to these groups. This opposition is both efficient and effective: it provides a clear and binding ideological difference from other groups, it provides the salient issues with which that

[23] Such as discovering that many of the New Testament documents were not written by the men whose names are attached to them.

[24] Clinical psychologist Mary Trump, the president's niece, leaves readers in no doubt that her uncle is *not* religious [*Too Much and Never Enough* (London: Simon & Schuster, 2020)].

difference can be reinforced, and it allows evangelicals to feel under threat from dominant out-groups that are perceived to denigrate them. Despite these differences, or perhaps because of them, evangelicals are not social fatalists. Out-groups are not perceived as either permanent or invincible, therefore evangelicals do not see themselves as socially immobile. On the contrary, they have some investment ('faith' is too strong a descriptor) in the broader American aspiration to social mobility. It is clear that a candidate like Trump, perceived as anti-establishment, beguiling to people who feel marginalized by the destruction of traditional industry, and who in general defines himself in opposition to many of the same groups opposed by evangelicals, was going to be broadly appealing to them.

Why, however, does this appeal override Trump's rebarbative characteristics – such as sexual misbehaviour and playboy lifestyle – that would normally make him repellent to evangelicals? The answer is primarily that Trump is not one of them. His appeal is not based on his being an evangelical – nobody could mistake him for one – so he was not assessed by criteria which define a member of the (evangelical) in-group. This observation also helps to explain why other Republican candidates who were undoubtedly evangelicals and whose policies were much the same as Trump's, but who were not perceived as maverick outsiders, did not appeal as much to their fellow evangelicals. In short, it was less important to be a member of the in-group than it was to be opposed to certain out-groups. This also explains why most evangelicals do not suffer the cognitive dissonance that might be expected from supporting a candidate whom they would otherwise find repellent.

SIT helps to explain evangelical electoral proclivities, but the above analysis is quite broad and might equally apply to a number of non-evangelical groups. For example, many of the in-group characteristics could probably describe the Ku Klux Klan. However, the above-noted SIT analysis of millenarian groups throws more light on evangelical distinctiveness. For example, millenarian ideology provides a narrative of a group's past and future. For evangelicals, the most significant elements in the narrative of their past are those of social decay and marginalisation, and cultural failure. These are not, however, cognitively sufficient to produce a robust sense of group identity and concomitant difference from out-groups. Rather, these are furnished by the evangelical narrative of, and orientation towards, the future. The reasons for this are straightforward. Even where evangelicals comprise a socially homogenous group, their narrative of similar backgrounds, social class, culture and so on is less potent that the mythology of a divinely ordered destination. Further, the more

evangelicals feel under threat from out-groups, the more this millenarian myth will buttress their social identity. In summary, millenarian mythology intensifies the perceived difference between evangelicals and the rest of society, and concomitantly intensifies their in-group identity.

This analysis enables us to understand some anomalies about President Trump's election that have mystified even well-informed church leaders. For example, in late 2017 the Archbishop of Canterbury lamented his inability to comprehend the strength of American conservative evangelical support for Trump: 'I really genuinely do not understand where that is coming from'.[25] Some 80 percent of self-identified white evangelicals say they voted for Trump. Given that Trump stands about as far from mainstream Christianity as might be possible while running for public office in the United States, Archbishop Welby's bewilderment is understandable. As we have seen, however, Trump's appeal for evangelicals has nothing to do with his lifestyle or sexual ethics and a great deal to do with his being perceived as an outsider, as someone who identifies himself as what he is not rather than what he is.

This analysis also throws light on the religious right's scepticism about global heating. For example, in 2014 the Reverend Professor Stephen Pickard, a bishop in Australia's Anglican church, sent a letter to all federal parliamentarians who professed Christian belief. His letter was aimed at conservative Christians who were sceptical about the science of global heating. Rather than address their scientific doubts, Pickard argued about theology. In particular, he tackled the matter of Genesis 1, in which God grants dominion over all living things – plants and animals – to humankind. Indeed, God's first command to human beings is to 'fill the earth and subdue it' (Gen. 1.28). Pickard argued that this chapter has been abused as a rationale for exploiting nature, a pretext driven by misinterpreting a biblical passage that 'really talks about the interconnectedness of all things'.[26] Pickard asserts it is not the natural world that needs to be subdued but rather 'the human proclivity to overwhelm and to take what is not ours to take'. The bishop's letter 'was expressed in language to which, one might

[25] Harriet Sherwood, 'Evangelical Christians "uncritical" in support for Trump, UK bishop says', *The Guardian* (28 December 2017).

[26] Mike Seccombe, 'How the religious right stall climate action', *The Saturday Paper* (26 August-1 September 2017).

have thought, devout conservatives might relate'. Unfortunately, the letter changed no minds and elicited no appropriate response. Given that the overwhelming majority of the world's religious leaders are of the view that climate change must be addressed, it is 'more than a little perplexing', Mike Seccombe suggests, that in Australia it is Christian politicians who lead the opposition to greenhouse gas reduction.[27]

From our SIT analyses, however, it is clear that Pickard's disappointment and Seccombe's perplexity are misdirected. Conservative Christian scepticism about global heating is driven not by theology but by social characteristics such as the desire to maximise differences from out-groups. As noted above under (7), members will pursue that desire even to the detriment of the group. That this pursuit is also to the detriment of the nation is irrelevant: the group is driven by the need to augment its identity, not by thoughts of benefiting out-groups.[28]

Blame *The Fundamentals*?

Mike Seccombe further notes that the only other country with similar political opposition to greenhouse gas mitigation is the United States. Reverend Tim Costello is of the view that the reasons behind American evangelicals' scepticism about and hostility to climate change mitigation have their origins in the success of *The Fundamentals: A Testimony to the Truth*, a series of 12 volumes published from 1910 to 1915.[29] Among other targets, the anti-science *Fundamentals* attacked the theory of evolution and 'higher critical' approaches to the bible. The above SIT analyses suggest that Costello's explanation is much less likely than factors concerning group identity.

There is other evidence to support this assertion. In 1977, James Barr noted that open conflict between Christian fundamentalism and science had greatly diminished over the years

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[27] Ibid.

[28] This also helps to explain why so many American evangelicals resist wearing face masks, even though they are told that wearing them will help to protect others from Covid-19. The need to reinforce in-group identity by refusing to wear masks is more important than accepting reasonable responsibility for the health of other people.

[29] Seccombe, 'religious right'. Publication was financed by Lyman and Milton Stewart, wealthy laymen from Los Angeles [Sydney E. Ahlstrom, *A Religious History of the American People* (New Haven: Yale University Press, 1972) 815-816.].

and consequently the battle over evolution had receded.[30] This might have been due in part to the American government's promotion of science following the Soviet Union's early lead in the space race and concomitant perceptions that the United States lagged behind Russian science.[31] However, in the second edition of *Fundamentalism* (1981) Barr noted a recent upsurge in creationism. This accorded with the observation of John Maynard Smith in 1983 that:

> Something very odd has happened during the past five years or so. The public has been persuaded that Darwinism, as an explanation of evolution, has been exploded. I find repeatedly, when discussing my work with non-biologists, that they are under the impression that Darwin has been refuted.[32]

Given that *The Fundamentals*' influence had clearly declined from the late 1950s, and there is no evidence of its return to prominence from about 1980, the reasons for this resurgence of creationism are probably to be found in changing social conditions. For instance, it is no coincidence that evangelicals became more assertively conservative – by increasingly emphasising their difference from other groups – from the time social inequality in America began to increase. Moreover, evangelical groups exhibit a high degree of congruence with SIT's millenarian groups. Consider, for example, criterion (v) and the perception that confronting events are controlled by divine forces. With reference to global heating, Republican congressman Tim Walberg stated that, 'As a Christian … I'm confident that, if there's a real problem, He [God] can take care of it'.[33]

SIT compared with alternative models

In order to assess our SIT analyses it would be worth comparing the results with those obtained using different models. To this end I have selected two models: one based on the cultural anthropology of Claude Lévi-Strauss (model A), and the other on the 'grid-group'

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[30] James Barr, *Fundamentalism* (London: SCM, 1977) 92.

[31] Ronald Strahan, 'The Creationism crusade' in *Confronting Creationism: Defending Darwin*, D. R. Selkirk and F. J. Burrows eds (Kensington, Sydney: University of New South Wales Press, 1987) 6.

[32] John Maynard Smith, *Did Darwin get it Right* (London: Penguin, 1993) 23. The chapter in which this quote appears was originally published in 1983.

[33] Seccombe, 'religious right'.

model of Mary Douglas (model B). Compared with SIT, these models might be more productive or not, and generate better analyses or not, but my hypothesis is that they should not produce significantly different results. Both models have been successfully applied to a wide variety of cultures.

Model A – Claude Lévi-Strauss's cultural anthropology

This model is based on Lévi-Strauss's assumption that one unconscious activity of the human mind is to impose structure on cultural content (such as myth) and that these unconscious structures are fundamentally the same for all people across all eras, regardless of a society's history, technological development and so on. This clearly Kantian assumption is based on Lévi-Strauss's observation that myths collected from different periods and widely different regions of the world are nonetheless very similar. The researcher's task is to find what they have in common and thereby draw up an 'inventory of mental patterns'.[34] In grasping the structure underlying a certain institution and its practices, the researcher acquires a 'principle of interpretation' that is valid for application to other institutions and practices in other eras.[35] With respect to mythology, this model eliminates the need to identify the earliest, truest or most authentic version of the myth under consideration. Instead, the myth comprises all its versions, ergo this model's suitability for comparing a myth's manifestation in two completely different societies separated by almost two millennia. The researcher breaks down the myth into its constituent units in an attempt to isolate 'the invariant elements among superficial differences' and thereby discern order behind the disorder of apparently arbitrary social data.[36]

With regard to the Parousia, Lévi-Strauss's method is particularly apposite because, as he sees it, any myth is driven by the need to resolve a paradox that appears to resist a solution. It is, in other words, an attempt to make sense out of perceived chaos, to impose order on apparent disorder. The purpose of a myth, then, is to provide a structure of thought that is

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[34] Claude Lévi-Strauss, *The Raw and the Cooked*, John and Doreen Weightman trans (London: Penguin, 1992) 10.

[35] Claude Lévi-Strauss, *Structural Anthropology*, Claire Jacobson and Brooke Grundfest Schoepf trans (New York: Basic Books, 1963) 21, 208.

[36] Claude Lévi-Strauss, *Myth and Meaning* (New York: Schocken Books, 1995) 8-11; and *Structural Anthropology*, 216-230.

capable of surmounting the contradiction that generated it. For example, if Jesus appeared on Earth to inaugurate God's kingdom, but the social and political order (Roman imperial rule) remained unchanged, then the mythological construal of an imminent second coming – to accomplish what the first failed to achieve – may resolve the paradox.[37] With regard to the Thessalonian community, this construal was further developed to overcome the distressing incongruity of believers dying before Christ returned.

What happens, however, when the Parousia is delayed for so long that most or all of the original cohort of believers have died? This was the situation facing the writer of *Ephesians*, a New Testament epistle written in Paul's name but which is generally agreed to date from after Paul's death.[38] One reason for regarding *Ephesians* as pseudonymous is that the genuine letters of Paul insist on the future physical resurrection of believers, as we noted from *1 Thessalonians*. In *Ephesians*, however, the writer states that God 'made us alive together with Christ … and raised us up with him and seated us with him in the heavenly places' (*Ephesians* 2. 5-6).[39] In this construal, living believers have already experienced a spiritual resurrection and are already receiving heavenly blessings. Clearly this is not a development of the Parousia myth. For the writer of *Ephesians*, the Parousia myth was confronted with the impossible task of overcoming a real, rather than merely perceived, contradiction. Ergo, the writer constructs a fundamentally different myth consisting of different structural elements. Importantly, by locating his new salvific myth in the past instead of the future, the writer abandoned the futurist orientation that reinforces the social identity and distinctiveness of millenarian groups. It is probably no coincidence that *Ephesians*, lacking the characteristics that support group identity, was not directed to a specific congregation (unlike other Pauline epistles) and might instead be a 'catholic' or circular letter.

According to Lévi-Strauss – and again congruent with SIT – myth is also an attempt to explain a group's fate – what has happened or will happen to it.[40] The main reason for this is

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[37] 'May', because other early Christian groups, such as those represented by the Johannine literature, developed very different mythologies and theologies to address this problem.

[38] On the authorship of *Ephesians* see J. D. G Dunn, 'Ephesians' in *The Oxford Bible Commentary*, John Barton and John Muddiman eds (Oxford: Oxford University Press, 2001) 1165-1167.

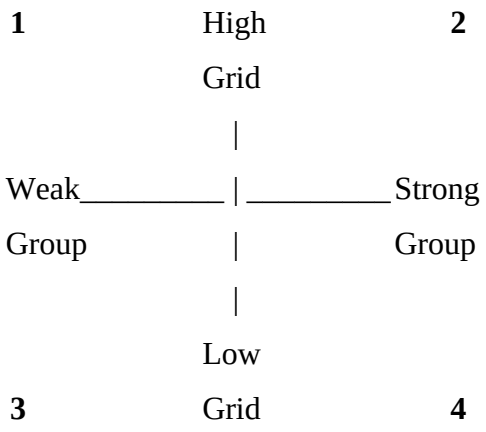
[39] The Greek verbs in this passage are in the past tense.

[40] Lévi-Strauss, *Myth and Meaning*, 41-43.

the necessity to ensure that a group's future remains faithful to both its present and its past. This helps to explain why the Parousia myth needed to be revised and then replaced. In brief, the Thessalonian church's future was beginning to appear as a betrayal of the original community. Deceased believers had to be incorporated into a revised myth, and when this strategy was no longer viable the past was remythologised so that the group's future destination was faithful to, indeed indivisible from, its past.

Model B – Mary Douglas's grid/group model

This model is the result of Mary Douglas's attempt to find better-integrated links between a people's culture, including cosmological ideas, and its social organisation.[41] Douglas proposed a simple, versatile identification model comprising a vertical axis ('grid') and a horizontal axis ('group').



The grid axis plots the degree of congruence between individual experience and a society's system of identification, organization and evaluation. In a 'high grid' society there is a high degree of fit between individual experience and these socially shared concepts. In other words, individuals adhere strongly to their society's cultural patterns and perceptions. At the other end of this axis, 'low grid' societies exhibit a low degree of fit between individual experience and shared cultural norms and constructs. Individuals have doubt about, or waiver in, their adherence to broadly accepted cultural perceptions. For these individuals, the

[41] Mary Douglas, *Natural Symbols*, 2nd ed. (London: Barrie and Jenkins, 1973) 82ff. For a more accessible description see Mary Douglas, *A Course on Cultural Theory: The Group/Grid Model*, lecture 1, 'A History of Grid and Group Cultural Theory' and lecture 2, 'Seeing Everything in Black and White' (Semiotics Institute Online, 2006).

(actual) world is largely incomprehensible because they do not adhere to the values, constructs and so on that enable other people to interpret the world as more or less coherent, consistent and comprehensible. This is congruent with SIT characteristics (2) and (3): the social interpretations and narratives that protect and maintain group identity may be inimical to a group's capacity to understand what is happening around it.

The horizontal 'group' axis plots the degree of pressure exerted on individuals to conform to the values and constructs of the group to which they belong. A 'weak group' indicates low pressure to conform, and thereby ambiguous group identity and vague distinctions between in-groups and out-groups. To the right along this axis, a 'strong group' indicates strong pressure to conform, with concomitant robust identity and definite distinctions between in-group and out-groups. Strong groups exhibit a clear set of normative symbols, often expressed in rites, that define and replicate group identity.[42] Any society will normally have the four cultural types represented in the diagram (for ease of reference I have numbered the quadrants 1 to 4). Each cultural type generates its own distinct cosmology, and the various groups in each quadrant will define themselves in various degrees of opposition to groups in other quadrants.

The grid-group model is apposite to our investigation because social entities in the lower right quadrant (4 – low grid/strong group) are associated with millenarian, end-of-the-world groups.[43] Among the characteristics displayed by groups in this quadrant is a dualist cosmology according to which the world is dominated by warring forces of good and evil, and concomitant views that in-group members are morally good and thereby not part of the 'fallen' world, while out-groups are charged with exhibiting moral failure and possessing corrupted ideas of justice. These characteristics intensify group boundaries and identity.

A fundamental quality of social entities in quadrant 4 concerns their use of knowledge. Congruent with our SIT analyses of the Thessalonian church and American evangelicals, in this quadrant knowledge is much more about epistemic identity than intellectual coherence.[44]

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[42] For a good summary see Bruce J. Malina, *Christian Origins and Cultural Anthropology* (Atlanta: John Knox Press, 1986) 13-15.

[43] Ibid., 64.

[44] Ibid., 41.

Knowledge is used to maintain and enhance group identity rather than understand the world. More broadly across society, the introduction of new facts has little to no effect within any quadrant because conflict between quadrants is much less about epistemic matters and much more about organisational disputes. As Mary Douglas deftly put it, debate between the quadrants is really a 'dialogue of the deaf', because any presentation of new facts will not change the opinion of social entities within their respective quadrants: 'whatever information is tendered, their differences are irreconcilable'.[45]

Further, and again congruent with SIT [characteristic (4)], each quadrant appears to behave irrationally from the perspective of other quadrants, but from the perspective of those within a quadrant such behaviour expresses group solidarity and identity. Indeed, behaviour perceived (by other groups) as less irrational would probably be regarded as compromise and thereby deemed betrayal of the group.

Conclusion

Application of SIT to the Parousia myth maintained by the New Testament's Thessalonian community has highlighted important characteristics – such as reinforcing the difference between in-group and out-groups, stereotyping of out-groups, and the role of epistemic identity – that help us to understand evangelical groups in contemporary America. Findings from our SIT analyses are congruent with those derived from social anthropology and grid/group models. American evangelicals supported Donald Trump in 2016 largely because he was the candidate who best satisfied their need to preserve social identity through differentiation from perceived hostile out-groups and through belief in a futurist mythology that could legitimately claim the imprimatur of scriptural tradition. Those who refer to climate change as an 'apocalyptic' threat may unwittingly, at least with regard to evangelicals, be expressing a social fact.

There is a further matter: if a person's or group's view on climate change is a product of their group identity, then rational argument with that person or group is almost certainly a waste of breath. This prompts an obvious question: has group identity infiltrated government to the degree that most of an administration's decisions are products of its social identity and

[45] Douglas (2006), lecture 2.

concomitant dogma rather than rational consideration? And if so, what does this mean for the capacity of governments to address climate change?

The Principle of Unripe Time is that people should not do at the present moment what they think right at that moment.[1]

Chapter 8
Governance

Overview

So far we have examined matters that contribute to poor decisions – folly, poor risk assessment, inadequate emotional response and so on. But what about the decision-making process itself? How do governments make decisions? For example, if we think they decide things in much the same way as individuals do, then we will probably be disappointed and mystified at their apparent lack of common sense or inability to see what appears obvious to the rest of us. Governments are often badly placed or poorly equipped to make rational decisions, but they are usually good at manipulating the discourse around those decisions. This chapter looks at J. L. Austin's speech-act theory to explain how discourse is manipulated and how some groups are silenced even when they speak.

Policy and political dogma

We normally think of a decision as a choice made between two or more options: you choose the best option after weighing evidence and/or assessing relevant risks. That option might be the best of a bad bunch, but it is still the best available. Ideally, the essence of decision-making in the public realm is that each option is assessed against certain criteria – fairness, cost, timeliness and so on – and the option chosen is the one that best satisfies those criteria. This is not how governments usually make decisions. As Richard Denniss observes, 'the harsh reality is that democratic debate is ultimately not about evidence'.[2] If it were then most governments would long ago have legalised many or most recreational drugs, invested far more in early years child support and public education, eliminated tax loopholes and havens for wealthy citizens, levied a hefty tax on sugar, and so on. In practice, governments rarely make evidence-based decisions because that is often not, and might sometimes be

[1] F. M. Cornford, *Microcosmographia Academica* (London: Bowes & Bowes, 1964) 24.

[2] Richard Denniss, *Dead Right: How Neoliberalism Ate Itself and What Comes Next*, Quarterly Essay, Issue 70 (Carlton, Victoria: Black Inc., 2018) 49.

antithetical to, their desire to remain in power and implement policies that embody their political dogma.

To that end, government decisions are usually not ends in themselves but rather the matériel of parliamentary battle. Policies are moulded or bent according to the 'exigencies of political warfare', and legislation is sometimes reduced to little more than a by-product of the struggle to attain and remain in power.[3] Ergo, governments usually attend to a bill's political values rather than its legislative merits, a priority that also distorts arguments for and against a proposed law or regulation. This process also makes it extremely difficult for governments to address any long-term national interests that require consistent work to achieve distant ends.[4]

A further problem is that an incoming government inherits the agenda and problems of the outgoing administration. Of course this does not entail that the government's trajectory is a straightforward continuation of its predecessor's, but it does mean that the new government lacks a free hand and that the grounds of its legislative and administrative agenda are largely not of its own choosing. The results can be disastrous. For example, President Kennedy inherited the CIA's Eisenhower-approved plan to invade Cuba;[5] President Johnson inherited his predecessor's escalating commitment of military 'advisors' to Vietnam; President Nixon inherited a full-blown war.

Little wonder, then, that governments often make decisions that leave us bewildered. They are prosecuting a legislative agenda that reflects dogma rather than evidence, often under conditions that are not of their own choosing. The following examples illustrate this contention. In 2003, the US Government – the president and congress – decided to invade Iraq. However, as Michiko Kakutani observes, this decision was 'not made through a rational

[3] As Katharine Murphy observes, 'As long as the status quo delivers a pathway to victory, the climate war in Australia will go on being an artefact of partisan politics rather than a practical problem to be solved' ['Scott Morrison and the Coalition are fiddling as Australia burns', *The Guardian*, Australian ed. (10 December 2019)].

[4] As Joseph Schumpeter notes in *Capitalism, Socialism and Democracy*, 2nd ed. (Mansfield Centre, CT: Martino Publishing, 2011) 286-287.

[5] Resulting in the notorious Bay of Pigs fiasco.

policy-making process and the judicious weighing of information and expert analysis'.[6] Rather, it was the prosecution of a preconceived idea, propelled by ideological certainty and fuelled by cherry-picked intelligence. These are the reasons why justifications for that decision have been embarrassingly feeble: for the most part, justifications work only if a decision was justifiable.

The second example is of a government whose decision-making powers have been dogmatically enfeebled to the point of being unable to make a decision even when a large majority of the electorate would agree with it. In 2017, the Australian Government conducted a referendum on whether to allow same-sex marriage. Despite clear majorities of citizens and parliamentarians, including government members, being in favour of same-sex marriage, the government refused to make a decision to amend the Marriage Act. Its decision to commission a referendum was a choice not to make a decision. The government abrogated its legislative responsibility by giving the decision to someone else – the electorate – at huge emotional and financial cost to the country. The government's inherited dogma did not encompass same-sex marriage and it could not bring itself to decide otherwise.

Policy inertia

In the context of debate over contentious issues like climate change, the main problem is that dogma produces policy inertia. To the extent that policies are expressions of dogma, obviously the latter has to change before new policies can be developed. If a dogma resists change – it usually does because its constituent ideas have been established through, and are abandoned only after, lengthy internecine party conflict – then policy change will be concomitantly slow and frustrating. If you believe that a government makes decisions in much the same way as we do, and could therefore choose a better option, you will usually be exasperated by its apparent inability to change its mind. As Barbara Tuchman observed, 'to recognise error, to cut losses, to alter course, is the most repugnant option in government'.[7] Ergo, when in 2019 the Queensland Government approved an application to open one of the world's largest coal mines in the state's Galilee Basin, its decision reflected a long-standing employment-over-environment policy rather than assessment of relevant issues, such as the mine's contribution to global heating, its effect on local water supplies, or even a

[6] Michiko Kakutani, *The Death of Truth* (London: William Collins, 2018) 31.

[7] Tuchman, *Folly*, 481.

straightforward cost-benefit analysis of the degree to which the mine will be subsidised by the taxpayer.

These observations help to explain why governments often pursue policies that are self-evidently not the best available to achieve even their own stated objectives. For example, in 2018 the Australian Government's objective was to stimulate the economy by increasing consumer spending. Clearly the best way to achieve this would be to maximise the proportion of consumer spending for every dollar retained by, or given to, citizens. Instead, the government reduced income tax for most people. These reductions mainly benefited wealthier sectors of the community; poorer sectors were only slightly better off, and unemployed people received nothing extra because they don't pay tax. Wealthy people already have enough to spend on consumer goods, so any extra money they receive will largely be spent on mortgages, investments or other non-consumer items, whereas poorer people would spend a much larger portion of additional money on consumer goods. If those without a job were given more money they would spend all of it on consumer products because they cannot afford a range of basic necessities. Giving bigger tax breaks to lower income earners, none to higher earners, and increasing the unemployment benefit, had been touted by business leaders and economists – normally a conservative government's natural constituents – but the government resisted their recommendations. If the government were carefully to assess the best way to achieve its goal, it would choose the option spruiked by business leaders and economists, so why didn't it implement that option? The reason is simple: the government's dogma was to support high-income earners, not welfare recipients or those on low incomes. In short, the best policy fell outside the government's dogmatic spectrum and was therefore beyond consideration.[8] Moreover, as if to verify this contention, the government repeated this basic economic error in its 2020 Budget.

[8] As I write, the Republican-controlled US Senate refuses to approve financial assistance that would enable millions of Americans to endure the Covid-19 pandemic. Republicans might not be concerned that nearly a tenth of the country can't afford adequate food or that 40 million are in extreme rent or mortgage stress, but they vociferously claim expertise in managing the economy. Ergo, they supported early re-opening of shops and businesses, even though medical experts said this was reckless, yet they won't approve a financial package that would assist the economy, even though economists say this aid is essential to maintain consumer spending. It is a clear example of a government knowingly acting against its own professed interests.

Indeed, 'choice' of a policy because it lamely conforms to a dogmatic stance is an anaemic notion of decision-making. In this vein it is accurate to state that the current Australian Government has never actually decided – after weighing of evidence and so on – not to do anything about climate change. Rather, it simply does not address the issue because neither of its constituent parties believes in global heating to the extent that it would, or even could, develop a coherent policy. In short, climate change is beyond its pale.

The implications for global heating are daunting. Most of us no longer expect that, when presented with robust evidence for a problem and a range of effective strategies to address it, governments will examine these strategies, chose the best, and act accordingly. This is rarely how governments work. Participants in large environmental movements and demonstrations around the world are increasingly aware that governments are mostly deaf to appeals predicated on common sense and rationality. But if governments make few evidence-based decisions, surely the electorate at least chooses the party to govern it.

The voter decides

In discussing differences between individual and group decisions, Michael Resnik states that in the United States 'voters can decide general social and economic policy' by electing a president from one party rather than the other. Moreover, insofar as he 'incorporates the national will', the president's decisions may be regarded as decisions of the nation. Ergo, when President Reagan decided to invade Grenada in 1983, 'this also became a decision of the United States'.[9] In the context of decision theory Resnik is strictly correct, but in these examples 'decision' has almost been emptied of meaning. This is not a semantic quibble; rather, it points to a fundamental problem with our notion of political decision-making. To begin, an election might appear to give citizens the opportunity to decide general policy, but in reality an election creates the illusion of choice while curtailing actual choice. In the United States, for example, it is very unlikely that any candidate in a presidential election could even have survived the nomination process if he or she espoused policies that included effective gun control, increasing the corporate tax rate, paying a liveable minimum wage, and introducing a carbon tax. By the time the election is held, the electorate's decision has been

[9] Michael D. Resnik, *Choices: an introduction to decision theory* (Minneapolis: University of Minnesota Press: 1987) 5.

reduced to a choice between two roughly similar candidates.[10] What is presented as a choice is actually the denouement of a process that excludes electoral choice. Consider a parallel situation in which a person is given the choice of any dish among 50 on a banqueting table, while another person is given a choice after 48 dishes have been removed. The latter could rightly complain that calling both acts a 'choice' is a cunning ruse to fob her off by concealing the huge difference between each act. In short, the idea that 'the voter decides' is often little more than a deceit.

Indeed, most people do not really think the electorate decides much at all. After all, when a group makes a decision, it normally assumes some responsibility for that decision, but most people do not feel any responsibility for the actions of a government, even if they happen to be among those who voted it into office.[11] Further, many people feel little sympathy for the idea that a leader decides something on their behalf, or speaks for the nation, when their vote for that person was based largely on him or her being slightly less odious than the alternative.

The notion that an electorate chooses national policy is misleading in much the same way as the argument by some oil companies that they are not responsible for the decisions of consumers who choose to use their products. Their view is that CO_2 emissions are a matter of consumer choice, so we (*qua* consumers) are to blame for global heating. As George Monbiot asserts, however, this is the biggest and most successful lie spruiked by fossil fuel companies because 'we are embedded in a system of their creation – a political, economic and physical infrastructure that creates an illusion of choice while, in reality, closing it down'.[12] For example, if you live in one of hundreds of towns or villages in the UK which lost its railway following the infamous Beeching report (1963), then you have no option but to use a car if you want to travel anywhere beyond walking or cycling distance.[13] For an oil

[10] Further noting that a president can be elected by a minority of the electorate. Both George W. Bush in 2000 and Donald Trump in 2016 failed to receive a majority of the total vote.

[11] I note that T-shirts proclaiming 'Don't blame me. I didn't vote for them.' have no counterparts stating the opposite.

[12] George Monbiot, 'The big polluters' masterstroke was to blame the climate crisis on you and me', *The Guardian* (10 October 2019).

[13] Some areas received replacement bus services, but many of those services lasted less than two years. See *Railway Finances*, report of a committee chaired by Sir David Serpell (London: Department of

corporation to say that residents in one of these areas are exercising their consumer choice to use petrol is a fraud.

Covid-19 and evidence-based decisions

The 2020 Covid-19 pandemic forced the Australian and many other governments to abandon, at least temporarily, their ideological attachment to privatising government services, balancing budgets and so on in order to help businesses survive and support the confronting number of people who lost their jobs. The Australian Government was forced to make decisions that were contrary to its usual dogma.

There are several points worth noting about these circumstances. Firstly, it took a pandemic for the government to change its mind. However, immediately before Covid-19, the country's worst ever bushfire season – over 30 people killed directly; widespread destruction of property and livestock; catastrophic loss of wildlife and habitat; major cities smothered by smoke for weeks[14] – had no impact on the government's climate change policies, and its financial support for people and businesses affected by wildfires was modest and piecemeal. Secondly, the government eventually listened to scientific advice about Covid-19 and acted accordingly, albeit tardily and inconsistently at times, whereas it has consistently failed to act on scientific advice about climate change. Thirdly, the chasm between the government's pandemic response and its normal policies demonstrates the fundamental inadequacy of those policies in helping those who needed support before Covid-19. As noted above, the payment for unemployed people had been insufficient for well over a decade, yet the government changed its mind and increased the payment when the pandemic caused a huge number of people to lose their jobs. The government assumed that these newly unemployed deserved more money, whereas those who were unemployed before Covid-19 had somehow been undeserving. In fact, the government was confronted with the clear fact that the unemployment payment was so miserly there would be political

Transport, 1983) #16.4. The minister responsible for Dr Beeching's appointment, Ernest Marples, had been managing director of, and retained interests in, a road construction business.

[14] Until the 'second wave' outbreak of July 2020 in Victoria, Covid-19 had killed many fewer Australians than were killed by the 2019-20 bushfires [Calla Wahlquist, 'Australia's summer bushfire smoke killed 445 and put thousands in hospital, inquiry hears', *The Guardian*, Australian ed. (26 May 2020)].

repercussions when the 'deserving' unemployed were confronted with the poverty that the 'undeserving' had endured for years.

The Australian Government listened to medical science to address Covid-19. Will it now listen to climate science in order to address global heating? Probably not, for the following reasons. First, unlike Covid-19, climate change lacks novelty value. The government had no experience of a pandemic, and possessed no relevant dogma to guide its response, and so sought advice from the only publically acceptable source of credible information. None of this applies to climate change. Indeed, the difference is visually clear: the prime minister was keen to appear in press briefings with the country's Chief Medical Officer, but has never appeared with the chief climate scientist.

Second, climate change lacks an appeal to immediate personal responsibility. If I don't comply with medical advice about interpersonal distance, mask wearing and hand sanitising, I put my family and the community at risk of infection, but if I don't comply with scientific advice about reducing my carbon emissions, I put nobody at risk. To put it another way, the effectiveness of government policy on Covid-19 depends on individuals being responsible and doing their bit, but doing your bit to reduce carbon emissions is ineffective unless the government itself is actively reducing the country's emissions.

There is a third reason, though it applies much less to Australia than to the United States, Great Britain, Brazil and Russia among others. Responses to Covid-19 have demonstrated that some leaders and governments are prepared to disregard scientific advice even in the face of clear evidence that their neglect will jeopardise the safety of, or kill, their own citizens. Covid-19 satisfies the four PAIN triggers – it is personal, abrupt, immoral and now[15] – but evidently this does not necessarily translate into appropriate action. Given that climate change satisfies none of the triggers, there is scant reason to believe that responses to global heating will improve after the pandemic has passed.

[15] The P, A and N triggers are straightforward. The I is triggered by our emotional aversion more than our moral revulsion. PAIN is explained at the beginning of chapter 6.

Parliamentary debate

The Australian referendum on same-sex marriage in 2017 (discussed above) was a paradigm of a government's incapacity to veer from policy dogma. Among several other curious features to emerge from this matter, the 'public showed it was more willing and able to conduct a mature debate than the current parliament'.[16] Given the poor quality of public debate in Australia this observation is rather sobering, but it points to a probable deficiency in contemporary Westminster-style parliamentary systems: parliaments do not provide a forum for debate, at least not in the sense of debate leading to a well-considered decision. For those who have listened to a debate on, say, a controversial bill, this assertion will elicit no surprise. As we have seen, parliamentary debates are not conducted in order to examine facts or weigh options, let alone change a member's mind. The position of respective parties on the bill's content is known in advance, and a vote on the bill will divide on party lines.[17] In short, parliamentary debates are almost invariably expressions of party dogma, not arguments about evidence.

Does it matter that most parliaments fail to provide an adequate forum for debate? After all, if you want to persuade people to your point of view you will usually be more successful if you appeal to their emotions and prejudices rather than employ rational argument. As Eleanor Gordon-Smith observed after her own failures to change (male) minds through rational debate:

> How many times have you seen a TV discussion in which the defender of one view turned to their opponent and said, 'You know, actually, that's a pretty good point'? Ever? And when *you* have changed your mind about something close to you, was it because of a rational argument, or was the process stranger and more difficult to map – like a subterranean rumble you weren't aware of until it was over? … So why, when we know that changing our minds is as tangled and difficult and messy as we

[16] Denniss, 51.

[17] Perhaps once or twice in a parliamentary term the parties will allow members to have a conscience vote – that is, members do not have to vote along party lines – but in my nearly 15 years working for a parliament only one member changed her mind as a result of such debate.

> are, do we stay so welded to the thought that rational debate is the best way to go about it?[18]

One answer is that, taking our cues to some degree from Plato and Aristotle, most people have found it convenient to distinguish reason from emotion, rational from irrational.[19] As Aristotle argued, we cannot be praised or blamed for having emotions or feelings – because we simply become angry or fearful, for example, rather than *choose* to become angry or fearful – but our emotions should be governed by reason.[20] However, he is also clear that rational arguments in themselves are not enough to convince people to act rightly. Rational arguments might be able to 'encourage and stimulate the generous-minded among the young', but they are incapable of persuading 'ordinary people toward noble-goodness'.[21]

Of course, this does not entail that all rational argument is futile. Most of us have on occasion been persuaded by well-reasoned argument to change our minds about certain matters, but these tend not to be issues in which we have high levels of emotional investment; that is, they have more epistemic than emotional and/or moral content. For example, I have been persuaded to remove some trees growing next to my house, because the epistemic content of the argument – the trees are highly flammable and frangible – outweighs the emotional/moral content of my opposition to tree removal. On the other hand, over the decades of my support for voluntary assisted dying (VAD) legislation I have failed to change the view of anybody opposed to VAD. Debate over VAD generates high levels of emotional investment and moral outrage on both sides, so it is hardly surprising that rational argument has changed few minds about the epistemic content.

A fundamental problem with the rational/emotional dichotomy is its tendency to reinforce the maleness of reason and concomitantly devalue emotion as female. Reason is perceived as male (and therefore valued) and objective, whereas emotion is construed as female (and therefore inferior) and subjective. The 'man of reason' transcends and is valued

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[18] Eleanor Gordon-Smith, *Stop Being Reasonable* (Sydney: NewSouth, 2019) 11-13 (italics in original).

[19] The difference between our emotional and rational brains was discussed in chapter 6.

[20] Aristotle, *Nicomachean Ethics* 1105b30-1106a5; *Eudemian Ethics* 1219b35-1220a15.

[21] Aristotle, *Nicomachean Ethics* 1179b5-10.

more than the 'woman of emotion'.[22] When, during the 2019 bushfire crisis Australia's Deputy Prime Minister, Michael McCormack, labelled those concerned about climate change as 'raving inner city lunatics',[23] he was drawing on at least one familiar motif and dichotomy: the rational, self-sufficient and unemotive 'man on the land' in opposition to the hysterical feminised city-dweller.[24] The fact that rural fire-fighters – many are women but most are men – were also 'ranting' about climate change was irrelevant to the deputy's attempt to dismiss global heating as a concern of the irrationally non-masculine and non-rural. The deputy's assumed rational high ground fails to comprehend that those who rage about global heating are more objective about it *because* they are more partial and engaged, and they are so *because* they have more contact with and knowledge about the issue. Like many people, McCormack thinks that the opposite of partiality is impartiality. He is wrong; the opposite is indifference, just as the opposite of interest is boredom, not disinterest.[25] The deputy himself is a paradigm of indifference masquerading as unemotional objectivity.

A further problem is our assumption that language is fundamentally 'democratic', that it works much like a set of tools, so that if I have the right tool then my use of it will function in the same way, and have the same effect, as somebody else's use of it. But what if governments and other powerful entities are able to ensure that one group's words do not function in the same way as another group's use of the same words? As Eleanor Gordon-Smith puts it:

> We built our landscape of public debate on the premise that words were tools that anybody could use, and that the clash of ideas would help us change each other's

[22] The classic work in this field is Genevieve Lloyd's *The Man of Reason* (London: Methuen, 1984). See in particular 103 ff.

[23] David Crowe, 'Deputy PM slams people raising climate change in relation to NSW bushfires', *The Guardian*, Australian ed. (11 November 2019).

[24] It is noteworthy that this motif is nearly the opposite of its historical forebears. In Nazi Germany, for example, the city was associated with rationality and detachment from community, to which the antidote was rural, communal anti-rationality.

[25] For an insightful discussion of engaged objectivity, see Max Deutscher, *Subjecting and Objecting* (St Lucia: Queensland University Press, 1983) 72-75.

> minds and bring us closer to the truth. But what if it turns out that discourse itself is as vulnerable to power imbalances as the problems we are trying to solve with it?[26]

For example, there is currently debate in several countries (Australia among them) about freedom of religion. Religious freedom was once something craved, but not enjoyed, by many people who lived in the Soviet Union or China (to mention only two countries). It was the longed for freedom of powerless people to practice their religion without being persecuted by state or local authorities. In the context of current debate in Australia by a collective of church leaders, politicians and other powerful public figures, freedom of religion is the right to discriminate against people whose social class, disability or (especially) sexuality renders them undesirable to church-affiliated establishments. The linguistic resonance of religious freedom for the powerless has been appropriated by a formidable group to evoke the suggestion that the religions it represents are being persecuted if they are not granted special exemption from laws (particularly those covering antidiscrimination) that apply to everybody else. In brief, words used by one group have a very different effect and meaning when they are used by a much more powerful group. Why and how does this happen?

Doing things with words

One of the best explorations of this problem is from J. L. Austin's *How to Do Things with Words*. Austin's analysis is based on his view that 'to *say* something is to *do* something'.[27] For example, if I say, 'this government must take action to address climate change', I am not only sprouting a sequence of words; I am also *accusing* the government of inaction and *demanding* that it act in an appropriate way. In order to clarify what is happening, Austin considers speech in three ways: as *locutionary*, *perlocutionary* and *illocutionary* acts. The first is relatively straightforward. My statement about the government and climate change consists of familiar words in a familiar sequence – subject, verb and object – and its conventional semantic meaning is clear. A perlocutionary act refers to the effects or consequences my statement will have. This will depend on a range of factors, such as my social status and perceived expertise, the audience, the situation in which I speak, and so on.

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[26] Gordon-Smith, 52.

[27] J. L. Austin, *How to Do Things with Words*, J. O. Urmson and Marina Sbisà eds., 2nd ed. (Cambridge, MA: Harvard University Press, 1975) 12 [italics in original].

An illocutionary act is what I intend my statement to do – to act as an accusation and demand, and bring about some legislative action on climate change. Again, this will depend on the situation in which I speak, and also what I'm attempting to do or think I can do. Sometimes I will perform an unintended illocutionary act because the felicity conditions that would facilitate my intention are absent or I have badly misread the situation.[28]

Illocutionary acts may have several further properties.[29] If I were a judge, my above statement could be a judicial verdict on the government's failure to address climate change. In this context my statement is a *verdictive* act. If I were prime minister, I might be enunciating an authoritative decision that the government is going to do something about climate change – an *exercitive* act – or I might be announcing the government's pledge to do something, though with only a vague idea about how to go about it – a *commissive* act. If I were the victim of a prolonged drought, I might be reacting to and condemning the government's inaction – a *behabitive* act. These classes of utterance help us to understand what is going on with the following statements made during the prolonged and catastrophic bushfire emergency in 2019-20.

We have already noted the Deputy Prime Minister's dismissal of 'raving inner city lunatics'. He went on to say: 'We've had fires in Australia since time began, and what people need now is a little bit of sympathy, understanding and real assistance'.[30] The Deputy Premier of NSW was more forthright: 'it is an absolute disgrace to be talking about climate change while we have lost lives and assets'.[31] When the Premier of NSW was asked about the link between climate change and bushfires, she replied, 'I don't think it's appropriate to get into a political argument as to what the causes are at this stage'. She added: 'when you face people who are protesting [about climate change], I say to them, why don't you help people

[28] The term 'felicity conditions' is not Austin's. He talked about *in*felicities – when an utterance fails to achieve the desired performance because conditions under which it was uttered were unsuitable [Austin, 14 and passim]. Most commentators therefore refer to 'felicity conditions' which must be satisfied for an utterance not to succumb to infelicity. See, for example, Rae Langton, 'Speech Acts and Unspeakable Acts', *Philosophy & Public Affairs*, vol. 22, no. 4 (Autumn 1993) 301.

[29] For the following see Austin, lecture XII.

[30] Crowe, 'Deputy PM' (11 Nov. 2019).

[31] Alexandra Smith and David Crowe, 'Deputy Premier says climate change talk amid fire crisis a "disgrace"', *The Guardian*, Australian ed. (11 November 2019).

who have lost everything?'.[32] The federal minister responsible for water, drought, natural disaster and emergency management said: 'I don't want to weaponise it [discussion about climate change] in the middle of someone's misery'.[33] Former deputy prime minister, Barnaby Joyce, was not so circumspect in politicising the situation. He suggested that two people killed by bushfires 'most likely' voted for the Greens,[34] and that 'so many of the practicalities of fighting a fire and managing it have been stymied by the Greens'.[35] When the Prime Minister was asked about climate change, he replied:

> I'm focussed on the needs of the people in this [emergency evacuation] room today … [and the] resourcing of our firefighters … to keep those firefighters safe and to protect as many properties as we can. You've got firefighters out there saving someone else's house while their own house is burning down. And when we're in that sort of situation, that's where our attention must be.[36]

As locutionary acts, these statements are mostly requests for sympathy towards victims and declarations that it is inappropriate to talk about climate change while bushfires are destroying property and people. As perlocutionary acts, the statements' effects will vary but probably have at least one element in common: the general perception that, whatever your view about climate change and bushfire preparedness, or whether you live in a city or in a

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[32] Ibid.

[33] Ibid. It is worth noting that these statements are almost the same as those issued by the National Rifle Association after mass shootings in the United States. For example, after 32 people were murdered at Virginia Tech in 2007, the NRA said, 'This is a time for people to grieve, to mourn, and to heal. This is not a time for political discussions or public policy debates.' [Harry L. Wilson, *Gun Politics in America* (Santa Barbara: ABC-CLIO, 2016) 544]. The NRA's strategy is to avoid scrutiny and admission of culpability by expressing concern for victims and bereaved, and by imputing insensitivity to those who want to debate gun violence. The NRA usually promises to engage in debate after an appropriate period, but this is a ruse to let the media cycle move on and thereby allow the public's attention to wander elsewhere.

[34] David Crowe and Max Koslowski, '"Take it down a few notches": Morrison urges calm as fire blame game escalates', *The Guardian*, Australian ed. (12 November 2019).

[35] Richard Denniss, 'Climate change makes bushfires worse. Denying the truth doesn't change the facts.', *The Guardian*, Australian ed. (13 November 2019).

[36] Crowe, 'Deputy PM' (11 Nov. 2019).

rural community, governments are feckless and out of touch. Nonetheless, for many people these statements served to stifle debate about climate change, even if other people were angered to more vigorous condemnation of the government. As illocutionary acts, none of the statements performed as its enunciator intended, except to a limited degree. However, this does not entail that those statements were wholly unsuccessful. For example, all speakers intended to portray people who want action on climate change as political point-scorers and heartless city-dwellers who possess no understanding of, or sympathy for, rural folk. This intention was only partly realised, but it established an area of discourse that equated argument about climate change with lack of compassion, and was a declaration that the government will decide when and where debate about global heating may occur. In particular, it was an assertion that citizens cannot use a disaster exacerbated by climate change to question the government's response to it.

The above are largely exercitive illocutions because they assert the speakers' power or influence to prohibit debate, or restrict or determine the field of discourse. They are also behabitive illocutions – reactions against, and expressions of attitude towards, other people's and parties' alleged conduct. Austin appositely noted that behabitives possess a 'special scope for insincerity'.[37] The above speakers' confected outrage and duplicitous concern for firefighters – whose government funding had been reduced – confirm Austin's view. None of these statements is a commissive illocution. Even though the situation appeared to demand at least one commissive – enunciation of the government's commitment to address climate change – each speaker shaped the discourse such that the government's opponents uttered the *content* of this commissive. However, lacking the authority to articulate a commisive or an exercitive illocution, opponents were reduced to expressing a range of rather feeble behabatives.

Government members' overall intent was to control the parameters and narrative of response to an event that is outside those areas of discourse in which the government is more comfortable and/or better able to control or direct communication. These speakers recast the issue of global heating into a matter of group identity – particularly city against country, the former accused of trying to impose their will on the latter whom the government purports to defend.

[37] Austin, 161.

The government's eternal present

When a minister or prime minister is asked why their government was poorly prepared for widespread bushfires or what the government is going to do about climate change, the respondent often retreats into the eternal present: 'I'm concerned with people's needs right now, not with what is supposed to have happened in the past or what might happen in the future.' This is a shrewd illocutionary manoeuvre. By severely circumscribing the temporal limits of discourse, the government renders itself effectively immune from criticism, and thereby free to repeat its errors. There can be no genuine discussion of a government's past inaction or plans for the future if it determines that only the present counts as a possible area of discourse. The perlocutionary effect is to reduce or evade accountability for past failure, avoid the risk of having to enunciate ideas about the future, and restrict dialogue to a domain most governments control merely by being in power – the present. Herein lies the key to this strategy: governments cannot manipulate narratives of the past or future in the same way, or to the same degree, as they can control the present.

The ramifications of this tactic are parlous. A government that refuses to discuss its past is less likely to acknowledge its mistakes and learn from them. Refusal to discuss the future entails an unwillingness to countenance uncertainties and to plan, let alone budget for, things that lie well beyond a government's term of office. Covid-19, for example, exposed the failure of so many governments to develop even modest plans and infrastructure in anticipation of a pandemic. The illocutionary intent of retreating into the present has the perlocutionary effect of constraining a government's capacity to do more than merely react to events.[38]

Frustration and disablement

What about statements from those who lack power, such as opposition parties and climate activist groups? Like government speakers, they will experience perlocutionary frustration (failure to achieve desired effects) and illocutionary disablement (failure to perform the action intended) though to a greater degree, but unlike government members

[38] Timothy Snyder talks about the 'politics of eternity' with regard to Russia, but his point can be applied to governments unwilling to address climate change. For example, 'eternity politicians' are adept at confecting crises in order to distract from their unwillingness or incapacity to undertake reform [*The Road to Unfreedom* (New York: Tim Duggan Books, 2018) 8].

their lack of power entails more-severe communicative deficits.[39] For example, when the government declares that now is not the time for debate on climate change, other groups do not possess the exercitive authority to declare otherwise. It does not matter whether these groups raise the issue and lambast the government. If the government declines to debate, then other groups may enunciate any number of evidence-rich and logically coherent arguments but those words will usually be ineffective. If you are powerful, you can let other parties say what they like, but by controlling the conditions and domain of discourse you can also stop their words from counting as an intended illocutionary act. As Rae Langton observed, 'powerful people can generally do more, say more, and have their speech count for more than can the powerless. If you are powerful, there are more things you can do with your words.'[40] This privilege extends to poor argument, flyblown cliché and outright lying. In response to Barnaby Joyce's statement about Greens preventing adequate bushfire prevention, Richard Denniss rightly noted that, 'in a democracy, power is the ability to talk crap and get away with it'.[41] Joyce's statement is manifest rubbish, but this is mostly irrelevant to its perlocutionary and illocutionary activity. What counts is not whether his statement conforms to universal criteria of fact and logic, but whether it is authoritative for a certain audience in a certain domain – mainly those who are suggestible to feeling aggrieved about outsiders telling them what to do. Indeed, when we (I include myself in this criticism) ridicule politicians like Joyce for the factual and logical bankruptcy of their statements, we are missing the point. They are not engaging in rational argument in an arena where all speakers

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[39] The terms 'perlocutionary frustration' and 'illocutionary disablement' are Rae Langton's from 'Speech Acts', 315.

[40] Ibid, 299. Conversely, Miranda Fricker talks about 'hermeneutical injustice'. She cites the example of a woman who suffered sexual harassment *before* this concept was generally recognised. The victim could not adequately comprehend her own experience, let alone explain it intelligibly to others. Compared with her harasser, the victim endured cognitive disadvantage and hermeneutic marginalisation caused by unequal participation in 'the practices through which social meanings are generated' [*Epistemic Injustice* (Oxford: Oxford University Press, 2007) 6]. In short, the victim was further victimised by the structural prejudice inherent in society's misunderstanding of, and incapacity to enunciate, what happened.

[41] Richard Denniss, 'Climate change' (13 November 2019). Joyce's statement was both factually wrong and illogical: there has never been a Greens government in Australia and therefore the party has never been in a position to determine bushfire policy. In reality, the main factors influencing bushfire preparation were government rejection of fire chiefs' advice, budget cuts to national parks, and diminishing climatic windows for hazard-reduction burns.

are linguistically equal. Rather, the arena's felicity conditions ensure that statements by the less powerful have no exercitive authority or behabitive clout. Ergo, Joyce's statement requires that Greens supporters have to respond by supplying corrective facts, but the domain in which to respond has been chosen by Joyce. Declining to respond is not an option – because in this domain, silence is taken to imply that Joyce is correct – whereas any response not only fails as an authoritative speech act but also becomes tainted by the irrationality of the accusation that prompted it and of the arena in which it is enunciated. The following is a paradigm of this process.

The Vietnam War: rational argument in an irrational arena

In mid-1968, when the war in Vietnam was near its height, the United States was energetically preparing for November's presidential election. Given the public's dismay over, and reaction to, political confusion, incompetence and deceit regarding the war, it appeared that debate over America's involvement had been won by its opponents. Ergo, nearly all presidential candidates sprouted some of the rhetoric that had hitherto been the domain of the peace movement, and all candidates appeared to believe that the incoming president would have to withdraw troops from Vietnam. Among many former supporters the war had lost whatever justification it might once have possessed. Before his resignation as secretary of defence in late 1967, even Robert McNamara had lost faith in a conflict for which he bore a large measure of responsibility.[42]

However, by early 1970 America's engagement in South-East Asia had *increased*, not decreased.[43] Endeavouring to account for this anomaly, the *New Yorker* noted a 'peculiar

[42] Paul Hendrickson describes McNamara as 'a kind of postwar technocratic hubristic fable. He was an extraordinarily impressive person, almost a new Adam, who abused his trust, and knows he did' [*The Living and the Dead: Robert McNamara and five lives of a lost war* (Sydney: Vintage, 2000) 356]. McNamara was the quintessential technocrat – ferociously intelligent, efficient and rational – who failed utterly to comprehend that most of a country's problems, let alone a war on the other side of the world, are not amenable to technocratic solutions.

[43] The number of American ground troops in Vietnam had declined from its height in 1968, but the United States had intensified its bombing campaign, and in April 1970 it broadened the war by invading Cambodia. As Barbara Tuchman observed, this was 'the most provocative choice possible in the circumstances' [*Folly*, 457].

atmosphere of mental exhaustion' in which both sides of the debate seemed drained of their 'forensic stamina':

> It is as though the public had shrugged its shoulders and decided to accept the war as something that cannot be affected by human effort. The war has outlived the *issue* of war.[44]

Indeed, the conflict's fatal irony was not lost on its opponents and even on some of its supporters: America was destroying the country it had gone to war to save. However, opponents also found it futile to repeat this and other familiar arguments. The main reason was that the gap between official explanations and the realities people saw daily on television and read about in newspapers had become so extreme that those who persisted in rational argument felt they were becoming as obtuse and hare-brained as the government they criticised. After all, pointing out discrepancies between official versions of events and their reality presumed that the war's prosecution was driven by a degree of rationality which had been demonstrated not to exist. Indeed, the disparity was so great that public policy about the war was developing in response to the political situation in America, whereas the war's actual conduct was developing in accordance with the brutality and confusion into which it had become mired. The war acquired a perverted and irrational life of its own, developing in ways that neither supporters nor critics anticipated. It no longer had a purpose, or even the pretence of one. At the height of America's engagement in Vietnam, neither the nation nor its military knew why they were there.

Lessons from Vietnam

The lessons of America's war in Vietnam are sobering when applied to climate change. The first is that one side can 'win' the debate, but still fail to effect much or any change congruent with its position. Second, prolonged, divisive debate can end in public exhaustion and ennui rather than a solution or compromise. Third, the subject of debate can be engulfed by peripheral matters such that it is inadvertently sidelined into hand-wringing helplessness. Fourth, debate about climate change has, to a large degree, outlived the issue of global heating. The debate has been transformed into expressions of tribal identity based on

[44] Quotes, and some of the general argument, in this section are from the Editorial, 'The Talk of the Town', *New Yorker* (18 April 1970) 33-34 [italics in original].

economic division, geographical location, perceived elitism and populism, and general feelings of social resentment and disenfranchisement.[45] Fifth, the gap between what a government says and what is actually occurring can be so enormous that, in continuing to point out the discrepancy, people feel mindlessly repetitive and simpleminded. Perhaps this is why some of the most effective protests to address climate change have been made by children – people young enough not to be rendered mindless by pointing out the fantasies in which their governments continue to indulge. Sixth, governments can knowingly act in ways that fatally undermine their own intentions, or they may have no idea what their intentions are, or their intentions are so ill-conceived they are unable to explain what they are or why they have them.[46] Seventh, people in power often possess, or develop, the ability to do what they don't believe in.

There is a further lesson: governments have the power to assume they are the locus of rationality, the corollary of which is that anybody opposed to them is therefore irrational. Protests against the absurdity of conflict in Vietnam and Cambodia were often brutally suppressed, as if the government's increasing irrationality were correlated with increasing violence. On 4 May 1970 at Kent State University in Ohio, the state's National Guard shot at unarmed student protestors, killing four and wounding nine. It was an entirely foreseeable result of a government reserving for itself the right to declare that those who oppose it are out of control. Less fatally, in 2019 when people protested (merely by linking arms across entrances) outside the International Mining and Resources Conference in Melbourne, police

[45] This point could be used to describe any number of social and political divisions. With reference to Britain's Brexit fiasco, for example, the mutual loathing each side of the debate has for the other, and the widening gulf between them, have gone well beyond the issue of leaving the European Union. Indeed, nearly all the social ills that propelled the pro-Brexit vote had nothing to with the EU; they were the result of British government policies. Brexit was a timely and convenient controversy through which to channel a society's broader frustrations and outrage.

[46] America's war in Afghanistan provides another striking example. In 2015, General Douglas Lute said, 'We were devoid of a fundamental understanding of Afghanistan – *we didn't know what we were doing*' [my emphasis]. After 18 years of conflict costing more than $1 trillion, with more than 2,400 Americans dead and over 38,000 Afghan civilians killed, the United States still cannot extricate itself from a war that has been an abject failure. It is clear that, having lied for two decades about Afghanistan, 'the American government refuses to be honest with itself' [Editorial Board, 'Lots of Lessons From Afghanistan; None Learned', *New York Times* (10 December 2019)].

reacted with a level of brutality that manifested a government's power to determine standards of, and criteria for participation in, public discourse. As Anthony Kelly observed, police believe they are the 'rational centre' in a maelstrom of socio-political issues – 'unbiased protectors of democracy who face the challenge of balancing competing rights'. This arrogation to themselves of rational oversight means they are often 'oblivious to, or wilfully ignorant of, their own unlawfulness'.[47] Police, as an arm of government, occupy the 'rational centre' only in the sense of enforcing a government's ability to determine that protests and protestors are irrational. In short, by virtue of their capacity to monopolise the domain of discourse, governments can determine whose words are meaningful and whose are not.

There is fundamental problem here. Two main pillars of a (self-perceived) rational society are its facility to control knowledge and its capacity to withhold it. The former helps to define the society; the latter helps to preserve its fragile self-worth. Both undermine a society's ability to discuss problems openly and act on them.[48] We assume that a rational society has the capacity to make sound decisions after well-informed debate, but that capacity is vitiated when a society arrogates criteria of rationality to itself. Little wonder, then, about the paucity of good decisions on climate change.

From scientific fact to public debate

Even when there is public debate, the ground of debate may overwhelmingly favour one side. In discussions about climate change, the most devious manoeuvre was to transform a scientific subject into a public debate. One side gained obvious advantages from this transformation. In particular, labelling any matter as a debate implies – whether correctly or not is irrelevant – that the issue under scrutiny is debateable. To consider a parallel example, even the historicity of the Holocaust has also been transmogrified into a debate. Historian Deborah Lipstadt has responded by refusing to participate in any debate with a Holocaust denier. As she states, the fact of the Holocaust is not a matter of debate, so to appear with somebody who denies that fact 'would give them a legitimacy and a stature they in no way deserve'.[49] After Lipstadt refused an offer to debate a prominent Holocaust denier on national

[47] Anthony Kelly, 'Brutality checks on activists', *The Saturday Paper* (9-15 November 2019).

[48] See John Ralston Saul for some of these points [*Voltaire's Bastards* (Toronto: Penguin Books, 1993) 295].

[49] Deborah E. Lipstadt, *Denying the Holocaust* (London: Penguin, 1995) 1.

television, the program's producer argued, 'but don't you think our viewers should hear the *other side*?'.[50] At the heart of this question was an incapacity to distinguish genuine historiography from an ideological exercise driven by antisemitism. In their concern for people to hear both sides of a debate, media producers became unwitting but 'important assets' in deniers' exertions to disseminate their claims. The success of this strategy is beyond question: high school teachers in the United States find that students who have heard about Holocaust denial 'assume it must have some legitimacy'.[51] Indeed, denial occasionally rides on the back of genuine debate about the Holocaust – such as the degree to which ordinary German citizens were culpable – thereby conflating and confusing legitimate argument with confected debate.

Similarly, denial of global heating has thrived on contrived debate. It is naïve to think that those who entertain scepticism or denial about climate change must be uneducated or ignorant. For example, prolific author, omnivorous reader and media critic Clive James wrote the following:

> In fact the number of scientists who voice scepticism has lately been increasing. … I still can't see that there is a scientific consensus. There are those for, and those against. Either side might well be right, but I think that if you have a division on that scale, you can't call it a consensus. Nobody can meaningfully say that 'the science is in'.[52]

All of this is factually wrong, but in itself that doesn't matter. What does matter is that James' 'scepticism' – though doubt based on easily-checked falsehoods is not scepticism but rather epistemic evasion, or sheer laziness – is perfect fodder for denial of global heating, because deniers do not have to win the debate; they merely have to ensure it continues.[53] To that end,

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[50] Ibid, 2 for this and the next quote [author's italics].

[51] Ibid, 4.

[52] Clive James, 'In praise of scepticism', *BBC Magazine* (23 October 2009).

[53] This is reminiscent of a strategy employed by the tobacco industry. As an industry document infamously stated, 'Doubt is our product since it is the best means of competing with the "body of fact" that exists in the mind of the general public. It is also the means of establishing a controversy. Within the business we recognise that a controversy exists. However, with the general public the consensus is that cigarettes are in some way harmful to the health. If we are successful in establishing a controversy at the

epistemic indifference, false claims, obfuscation and any other diverting strategy are all effective.

Why, though, do those who maintain the scientific consensus about global heating have to win the debate? The main reason is that deniers enjoy the substantial advantage of arguing from the 'default' side of the matter – governments' general desire to do or spend as little as possible – whereas the scientific position has to win convincingly in order to effect substantial change. So long as deniers keep the debate going they are more likely to achieve their objective – continued inadequate action – whereas the mere fact that debate exists makes it less likely that the scientific side will achieve its objective. Moreover, the field of debate is unequal and favours denial. Deniers can put forward almost any drivel as a debating point to which the scientific side must respond.[54] If the latter does not refute a point, no matter how inane or thoroughly debunked, that point remains an argument to support inaction. On the other hand, the scientific side can put forward, and make claims based on, just one point of view – scientific research. The example of former professor of geology Ian Plimer is instructive. Plimer claims that Earth's volcanoes emit more CO_2 than the world's automobiles and industries combined.[55] In fact, fossil fuel emissions alone are at least 23 to 56 times more than volcanic CO_2 emissions.[56] However, once Plimer's claim was

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public level, then there is an opportunity to put across the real facts about smoking and health. Doubt is also the limit of our "product". Unfortunately, we cannot take a position directly opposing the anti-cigarette forces and say that cigarettes are a contributor to good health. No information that we have supports such a claim. Truth is our message because of its power to withstand a conflict and sustain a controversy. If in our pro-cigarette efforts we stick to well documented fact, we can dominate a controversy and operate with the confidence of justifiable self-interest.' [underlining in original]. Extract from 'Smoking and Health Proposal (1969)', Brown & Williamson Records, Truth Tobacco Industry Documents, 4-5. I have quoted this document at some length because it demonstrates the sophistication of tobacco industry tactics and the capacity of people to believe that truth (however conceived) is on their side despite clear and sustained evidence to the contrary.

[54] As George Eliot (Mary Ann Evans) put it, 'oppositions have the illimitable range of objections at command, which need never stop short at the boundary of knowledge, but can draw forever on the vasts of ignorance.' [*Middlemarch*, ch. 45].

[55] Ian Plimer, *Heaven and Earth* (Lanham, MD: Taylor Trade Publishing, 2009) 413.

[56] Calculated using data from the US Geological Survey: Volcano Hazards Program and the United States Environmental Protection Agency: Global Greenhouse Gas Emissions Data. Note that volcanic emissions may vary greatly from year to year.

proved wrong, he either repeated it in another forum or simply moved on to another falsehood, such as his canard that the world is not becoming hotter. As George Monbiot puts it with reference to live debate, it takes just 30 seconds to make a misleading statement, but 30 minutes to refute it. Ergo:

> By machine-gunning their opponents with falsehoods, the deniers put scientists in an impossible position: either you seek to answer their claims, which can't be done in the time available, or you let them pass, in which case the points appear to stand.[57]

As with Holocaust denial, the problem is exacerbated by media insistence that both sides of an argument, even a phoney one, be presented. To that end, *The Spectator* gave Plimer a cover story under the headline *Relax: global warming is all a myth*, and an interview entitled 'The great climate change con trick'.[58] Similarly, *The Great Global Warming Swindle*, a polemical and award-winning documentary, was broadcast on Britain's Channel 4, Australia's ABC, and in a number of European countries, in 2007. Though this program was nothing more than a clever re-presentation of already-debunked theories, it gained considerable traction in the community, thereby confirming the above observation that denial has much the easier task.

Speech-acts and climate change denial

Speech-act theory helps to illuminate the imbalance in arguments about global heating. Consider, for example, one of denial's more plausible assertions: a warming world will increase atmospheric water vapour and therefore increase cloud cover, which will in turn moderate or annul further temperature increases. This claim is wrong,[59] but it continues to appear in the standard arsenal of denial. When this claim is enunciated, its illocutionary force is to exasperate, and nurture doubts about, mainstream climate science; to continue the debate about global heating; and to direct that debate into diffuse areas of irrelevance. Its

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[57] George Monbiot, 'This professor of denial can't even answer his own questions on climate change', *The Guardian* (14 September 2009).

[58] *The Spectator* (11 July 2009).

[59] In fact, increasing temperatures are likely to *reduce* lower-level cloud cover, thereby exacerbating global heating [Steven C. Sherwood, Sandrine Bony and Jean-Louis Dufresne, 'Spread in model climate sensitivity traced to atmospheric convective mixing', *Nature*, vol. 505 (2014) 37-42].

perlocutionary force is to confirm the default position of doing little or nothing to mitigate emissions; to assuage our collective and individual sense of anxiety and urgency; and to raise immaterial questions, and unfounded doubts, about climate science and scientists. Importantly, denial suffers very little illocutionary disablement – having few positive illocutionary ambitions and nothing to prove – and concomitantly little perlocutionary frustration, because its effects are readily achieved.

On the other hand, refutation of the above assertion is a very different speech-act. As an illocutionary act, a scientist intends to refute the denier's hypothesis and thereby extinguish forever its role in this debate. Consistent with scientific method, a falsified hypothesis should be abandoned. The scientist also intends that her refutation will go some way to convince deniers and sceptics, and those who listen to them, to change their minds and embrace the task of addressing GHG emissions. None of this is likely to happen. The scientist's intention to refute the assertion and thereby limit the area of debate will suffer illocutionary disablement. Her falsification, though scientifically successful, will fail in this domain because the assertion's proponents do not observe the methods and etiquette of scientific discourse. Instead, the assertion will reappear in another forum, necessitating yet another refutation of something already refuted. To make matters worse, the scientist cannot avoid prolonging, and even legitimating, debate merely by participating in it.

The scientist faces a further problem. In most situations, authority endues an utterance with illocutionary heft. The scientist belongs to an authoritative group that is capable of exercising considerable influence within society; a good example was swift and effective political response to scientific alarm about the thinning ozone layer. In the context of climate change, however, the necessary felicity conditions for scientific influence – in particular, a specified problem amenable to a specific and manageable solution – are not present. This means that even within a domain in which science is (or should be) authoritative, its public authority is circumscribed by non-scientific criteria, such as political assessments of the problem being addressed. Scientists are allowed to speak (in most countries they do not suffer from locutionary suppression)[60] but they can be silenced – by illocutionary disablement

[60] It is worth noting, however, that the G. W. Bush administration appointed its own people to important public relations positions in order to muzzle scientists and redact agency reports. NASA's James Hansen was one target. Canadian prime minister Stephen Harper (2006-15) followed Bush's example. By 2012,

and perlocutionary frustration. Speech is not free just because you can say something. Rather, the defining character of free speech is that it '*enables people to act*'[61] – to do things with their words, such as protest, advise, and effect change. In the situation under discussion, scientists often do not enjoy genuine freedom of speech because they can be prevented from doing what they want to do, or think they are doing, with their words. Perversely, illocutionary and perlocutionary effectiveness is more often achieved by those who possess no authority in climate science, such as media 'shock jocks', because they enjoy more favourable felicity conditions. What is going on here?

Factual, rational and relational discourse

In essence, the problem stems from the difference between factual and relational discourse. Our scientist is engaging in factual discourse – communication of a fact or facts to another person – though more specifically she is conducting rational discourse, a more refined and powerful form of factual discourse. Rational discourse can certainly change minds, but only if participants conform to its rules. Under those rules, for example, if a claim were shown to be without factual foundation – such as Ian Plimer's assertion about volcanic CO_2 emissions – then it would sink without trace. Given that Plimer's views, and those of his fellow deniers, remain extant and vigorous, it is clear that most arguments about climate change have little to do with factual discourse. Instead, they haunt the domains of relational discourse. The point of relational discourse is not to impart facts but rather develop and/or appeal to relationships. This can be achieved through emotional connection, storytelling and shared narratives, building trust and respect, listening to and validating the other party's beliefs (or at least some of them) and identifying common values.[62] Relational discourse is more nuanced, and requires more interpersonal commitment, than factual discourse. Moreover, in most public debates, wherein emotional content significantly outweighs epistemic substance, you must first engage in plenty of relational discourse in order to create

90 percent of Canada's scientists said they could not speak freely about matters within their own fields of expertise, even if those matters concerned public health and safety [Otto, *War on Science*, 17-19, 30-32].

[61] Langton, 328 (italics in original).

[62] Tim Dean, 'Changing minds', *New Philosopher*, 26 (Nov. 2019 – Jan. 2020) 34-37. Dean found it useful to think about the two forms of discourse after reluctantly concluding, 'I used to believe that reason persuades. I'm no longer convinced it does.'

the appropriate environment in which rational discourse becomes worthwhile. Without this environment, rational discourse is usually ineffective.

Some of this helps to explain why certain politicians can be persuasive in counter-intuitive ways. For example, both Boris Johnson and Donald Trump appeal to anti-establishment sentiment, even though the former is a product of Eton and Oxford and the latter inherited stupendous wealth from his father. They don't persuade by fact or reason but by emotional identification with those who feel 'left behind'. Moreover, their bumbling incompetence endues them with an 'authenticity' that reinforces this identification.

There is a positive aspect to the difference between rational and relational discourse. We have noted that if our scientist wants to persuade people about climate change, she should first engage in relational discourse. This might appear to be a circuitous way of conducting a debate, but the advantages include much lower chances of illocutionary disablement and perlocutionary frustration. If you are engaging in relational discourse, your illocutionary intent should be to build a relationship, not win an argument, and the perlocutionary effect should be identification of shared values and emotions such that common ground is prepared for rational discourse. By preparing and assessing your speech acts against these goals you are more likely to avoid frustration and disappointment.

Speech acts and Aristotle's *Rhetoric*

While some of the above is different from our regular views of public debate, the counter-intuitive persuasiveness of some politicians is particularly confronting. To see why, it is worth comparing this phenomenon to relevant sections of Aristotle's *Rhetoric*, the earliest surviving, and probably most influential, treatment of rhetorical persuasion.[63]

[63] It is noteworthy that Aristotle claimed he wrote about rhetoric because earlier writers had addressed only a small part of the subject (1354a10-15). However, as G. E. R. Lloyd observes, it appears that Aristotle 'exaggerated the limitations of earlier rhetorical treatises for his own polemical purposes' [*Adversaries and Authorities* (Cambridge: Cambridge University Press, 1996) 86]. It seems appropriate that, in order to justify his work on rhetoric, Aristotle used the timeless rhetorical technique of exaggerating the deficits of one's opponents.

Aristotle asserts there are three kinds of verbal persuasion. They depend on the personal character of the speaker, on stirring the emotions of the audience, and on the demonstration, or apparent demonstration, provided by the argument itself.[64] With reference to the first, he contends:

> Persuasion is achieved by the speaker's personal character when the speech is so spoken as to make us think him credible. We believe good men more fully and more readily than others: this is true generally whatever the question is, and absolutely true where exact certainty is impossible and opinions are divided. But even this kind of persuasion, like the others, should be achieved by what the speaker says, not by what people think of his character before he begins to speak. It is not true, as some writers assume in their treatises on rhetoric, that the personal goodness revealed by the speaker contributes nothing to his power of persuasion; on the contrary, his character may almost be called the most effective means of persuasion he possesses.[65]

What qualities encourage us to think highly of a speaker's character? Aristotle specifies three familiar virtues: *phronesis* (good sense, practical intelligence), *arete* (virtue, goodness) and *eunoia* (goodwill, kindness).[66] Any speaker who is thought to have these qualities will appear credible and inspire trust. Most of us would probably agree with Aristotle's nuanced view. He is not saying that the speaker necessarily enjoys a good reputation but rather that this person must demonstrate by what he (Aristotle was not addressing women) says that he is a trustworthy character, and that this demonstration will augment his persuasiveness. However, little or none of this is congruent with what we have noted so far. Most people are as, or even more, likely to believe a charlatan as to believe a credible person, even if the former is known or suspected to be a charlatan.[67] Where there is room for doubt and alternative opinions, we are more likely to believe a person with whom we can identify and

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[64] Aristotle, *Rhetoric* 1.2 (1356a1-5).

[65] Ibid. 1356a5-15.

[66] Ibid. 2.1 (1378a5-10).

[67] As former Republican strategist Rick Wilson observed, 'There are no consequences for being untruthful. It's become a feature, not a bug. The audience expects them to lie.' [David Smith, 'The lies have it. Republicans abandon truth in Trump impeachment defence', *The Guardian* (15 December 2019)].

who reinforces our existing beliefs and prejudices rather than a person of integrity. Finally, we usually find a person's good character much less persuasive than his or her appeal to our venality.

Given this state of affairs, it is a relief to find that Aristotle himself was probably in two minds about some of these matters. For example, books 1 and 2 of the *Rhetoric* do not cohere satisfactorily and neither is an appropriate introduction to the field. While this might be the result of awkward editorial decisions, Jonathan Barnes' view is that Aristotle was in a muddle about the subject.[68] Barnes might be right (I think he is) but Aristotle's confusion is understandable and reflects our own. Like Aristotle, we prefer to think that logical argument (such as an enthymeme) is at the core of rhetorical persuasion, whereas attempts to arouse prejudice, anger, pity and so on have nothing to do with the substance of the matter but are rather emotional appeals to sway an audience.[69] On the other hand, Aristotle's (and our) confidence in, and use of, logical argument is qualified:

> We must not carry reasoning too far back, or the length of our argument will cause obscurity; nor must we put in all the steps that lead to our conclusion, or we shall waste words in saying what is manifest. It is this simplicity that makes the uneducated more effective than the educated when addressing popular audiences. … Educated people speak in generalities and abstractions, whereas uneducated people argue from common knowledge and draw obvious conclusions. We must not, therefore, start from any old opinion but only from those of definite groups of people – namely, our judges or those whose authority they recognise. … We should also

[68] Jonathan Barnes, 'Rhetoric and Poetics' in *The Cambridge Companion to Aristotle*, Jonathan Barnes ed. (Cambridge: Cambridge University Press, 1995) 262. The surviving works of Aristotle are based largely on the collection put together by Andronicus of Rhodes in the first century BCE. Andronicus grouped works together according to subject matter. For example, he probably assembled six or more works to form the single treatise we know as the *Topics*. However, even if the *Rhetoric* were awkwardly assembled, the parts are Aristotle's nonetheless.

[69] Aristotle, *Rhetoric* 1.1 (1354a15-20). 'Enthymeme' is Aristotle's term for a deductive argument that is appropriate for rhetorical situations – that is, less rigorous and detailed than would be appropriate for, say, scientific demonstration.

> base our arguments on what happens for the most part as well as on what necessarily happens.[70]

In short, an orator's argument and presentation will largely depend on the topic and the audience.

With reference to the topic of debate, an orator should avoid technical matters because they are difficult for an audience to follow, and avoid subjects of fixed and certain knowledge – 'things that could not have been, and cannot now or in the future be, other than they are'[71] – but rather address matters for which there are alternative points of view. In particular, this encompasses human activities: actions that are not invariable and do not necessarily comply with fixed rules. With reference to an audience, arguments must not be complicated or follow a long chain of reasoning,[72] and should be built on propositions that the audience already believes or is likely to accept. It is clear that Aristotle anticipated what has become oratorical common practice. It is also clear to see how proposals to address climate change are easily undermined: it is a technical subject with a high degree of epistemic certainty, while arguments against tackling it are amenable to simplistic assertions which appeal to an audience's pre-existing views.

What, then, about Aristotle's claim that the character of a speaker is his 'most effective means of persuasion'? Aristotle does not explain why we should accept this assertion. Indeed, when Aristotle contends 'it adds much to an orator's influence that his own character should look right and that he should be thought to entertain the right feelings toward his hearers',[73] he is close to stating that a speaker's image is more important than the substance of his argument.

It is further worth noting that at the beginning of book 3 Aristotle states:

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[70] Ibid. 2.22 (1395b25-1396a5).

[71] Ibid. 1.2 (1357a5).

[72] Ibid. 1357a1-5.

[73] Ibid. 2.1 (1377a25-30).

> In making a speech one must study three items: first, the means of producing persuasion; second, the language; third, the proper arrangement of the various parts of the speech. We have already specified the modes of persuasion, which we have shown to be three in number.[74]

Aristotle has introduced two new points – language and arrangement – neither of which was prefigured in the first two books. However, any attentive reader would reasonably suggest that the two new points are *also* means of producing persuasion, a suggestion congruent with Aristotle's own view that 'rhetoric may be defined as the faculty of observing in any given case the available means of persuasion'.[75] In other words, by book 3 the significance of an orator's character has diminished from one-third of the modes of persuasion to a third of one-third. Aristotle's shifting opinion is not difficult to discern. In book 1.1 he criticises sophistic rhetoric for its failure to address the most important part of rhetorical persuasion – pertinent and coherent argument – yet in 1.2 he reveals three modes of persuasion, two of which – arousal of emotion and apparent character of the speaker – are diligently exploited by sophists, and then in book 3 he introduces two further points, both of which are also exploited by sophists.[76] Aristotle wanted to emphasise and preserve the integrity of argument, and this implied, or even entailed, the orator's integrity, but since (as noted above) integrity is demonstrated by what the speaker says, an appearance of integrity is just as persuasive as the real thing. Indeed, appearance is even more persuasive if a speaker who possesses genuine integrity fails to convey that quality to an audience. Aristotle's uncertainty is patent: he provides detailed examples and discussion of appeals to emotion, and about the language and structure of argument, but no examples and almost no discussion of argument based on good character.

At the heart of Aristotle's ambivalence is his view that 'rhetoric is the counterpart of *dialektike*'.[77] Both can be used by anyone, both can be deployed on any subject, and neither requires specialized knowledge of that subject. Both use deductive and inductive argument,

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[74] Ibid. 3.1 (1403b5-10). The three modes are stated above.

[75] Ibid. 1.2 (1355b25-30).

[76] It could be that these passages were written in reverse order. Book 1.1 might be a later corrective to passages that follow.

[77] Aristotle, *Rhetoric* 1.1 (1354a1).

and both use the demonstrative force of argument to convince an interlocutor or audience. The main difference is that rhetoric concerns an audience. An orator delivers a speech, which entails limited or no question-answer interaction between orator and listeners. Further, the matters debated, and the delivery and reception of arguments, will reflect this activity's public character. Dialectic, on the other hand, permits and usually requires greater logical rigour than rhetoric because dialectic may address complex and technical matters not suited to public debate, and a respondent's answers may necessitate a different and more precise argument. This is all straightforward, but Aristotle rightly observes that, alone among the arts, dialectic and rhetoric can argue to, and draw conclusions on, *both* sides of a question, not (as Aristotle avers or hopes) to 'make people believe what is wrong' but in order to understand and thereby refute somebody arguing from the other side.[78] Aristotle clearly saw that dialectic and rhetoric could be misused, but this capacity is less important with dialectic. For example, in an argument about the merits of idealist versus empiricist views of reality, the bad character of one interlocutor is probably of little significance. The argument is unlikely to affect any matter of social or ethical consequence. Rhetoric, though, deals with issues of public or forensic import. Apart from goodness of character, Aristotle realised there is nothing to stop an orator from arguing in bad faith, attempting to persuade an audience towards a point of view he knows is either wrong or less desirable than the alternative. After all, the rhetorician's purpose is to win the argument, not establish the truth.[79]

Conclusion

Aristotle, like Plato and others before him, identified the sometimes perverse relationship between skilled orators and mass audiences, the former using their rhetorical brilliance to sway the latter, occasionally with catastrophic consequences. Aristotle would have recognised the counter-intuitive influence of some current politicians as not a bizarre aberration but as evidence of their destructive ability to shape effective modes of persuasion for the topic and audience addressed. The need for politicians of good character, and political systems that don't stifle it, is clear. Absent this state of affairs, most of us would be satisfied with a system in which domination by one person or bloc, to the exclusion of other points of view, was impossible or at least unlikely. What might such a system look like?

[78] Ibid. 1355a30-35.

[79] Unlike genuine dialogue in which no party is trying to win. See chapter 11.

Chapter 9
Hearing all Sides

Overview

One of the most pressing needs in any polity is for a forum in which all sides of a debate can be heard, in which no side is silenced simply because another side has the power to suppress or ignore its voice. This chapter discusses Stuart Hampshire's minimalist concept of justice as fairness in procedure, undergirded by the universal recognition that in any dispute it is unjust not to hear all parties to that dispute. It concludes with a discussion about the internet as a forum in which all parties have a voice.

Minimal conditions for dialogic justice

Stuart Hampshire argues that well-ordered societies and states require the following: one, an institution and procedure for settling disputes caused by conflicting claims/views advanced by individuals or groups within a society; two, a body to discuss available policy options and decide between them; three, in the event of disaster, a body of review to adjudicate between different causal explanations and, where appropriate, to assign responsibility.[1] This proposal seems straightforward. In Australia, for example, law courts perform the first function, parliament performs the second, and royal commissions more or less cover the third. The point Hampshire wants to emphasises is that these institutions 'all involve the fair weighing and balancing of contrary arguments'.[2] For justice to be done, and seen to be done, different sides of an argument must be presented and heard. In short, justice requires procedural fairness. Indeed, 'the basic concept of justice, taken by itself, is primarily procedural'.[3]

Hampshire's assertion is minimal. *Pace* Plato, Aristotle, Kant, utilitarians and myriad others, Hampshire does not base his schema on the notion of a supreme good for human beings.[4] The overriding reason for this is straightforward. There are competing conceptions

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[1] Stuart Hampshire, *Justice is Conflict* (Princeton: Princeton University Press, 2000) 7-9.

[2] Ibid. 8.

[3] Stuart Hampshire, *Innocence and Experience* (London: Penguin Books, 1989) 61.

[4] This should not be taken to imply that Hampshire rejects the idea of a supreme good. His own views are aligned with democratic socialism.

of human good, all advanced passionately and defended rigorously by their supporters. They are based on, or manifestations of, irreconcilable or even antagonistic beliefs and views.[5] If you back one of them then you are, at least to some degree, elevating its claims over rival views, or you might be in outright conflict with one or more of them. For example, if your view of human good is inseparable from, or even predicated on, stringent environmental standards, but my view is based on the primacy of individual rights, then most likely, though not necessarily, we will profoundly disagree on ways to address climate change.[6] We both seek the best way of life, but we see that 'best' differently. You will assert the need for government intervention and compulsion, and I will accuse you of trampling on my right to freedom from excessive government interference. As Hampshire observes of the human condition, conflict is a fact of human existence. It cannot be eradicated and should not be regretted, any more than one should regret possessing a back, even though it occasionally aches. According to Hampshire, we therefore require:

> a rock-bottom and preliminary morality of justice and fair-dealing … to keep a balance between competing moralities and to support respected procedures of arbitration between them.[7]

[5] As John Rawls states, this is 'a crucial assumption of liberalism … that equal citizens have different and indeed incompatible and irreconcilable conceptions of the good' [*Political Liberalism* (New York: Columbia University Press, 2005) 303]. However, Rawls also recognised 'fixed natural characteristics … Distinctions based on sex are of this type … Thus if, say, men are favoured in the assignment of basic rights, this inequality is justified … only if it is to the advantage of women and acceptable from their standpoint.' [*A Theory of Justice* (Oxford: Oxford University Press, 1972) 99]. As Michèle Le Doeuff rightly reacted, 'Oh yes! We saw this one coming … the appearance of some kind of anthropology in an argument alleged to be political-legal [*The Sex of Knowing*, Kathryn Hamer & Lorraine Code trans. (New York: Routledge, 2003) 183]. Rawls' view sits uncomfortably close to the conservative evangelical position that women are 'equal [to] but different' from men and therefore ordaining women as priests could be to their detriment.

[6] 'Not necessarily', because the view based on individual rights does not preclude another party from arguing that individual rights *require* government intervention in environmental matters.

[7] Hampshire, *Innocence*, 72, and for the two brief quotes which follow.

This is procedural justice, a negative quality because in and of itself it does not support or promote any particular moral schema or set of virtues.[8] It is a bare minimum, but it is also the indispensable foundation that undergirds any system of morality or virtues which are, or purport to be, directed to the public weal. Without procedural justice, 'society becomes an unstable clash of fanatacisms'. As Alasdair MacIntyre baldly put it, 'our society cannot hope to achieve moral consensus'. Modern politics, then, is not a matter of genuine moral accord; rather, it is more like 'civil war carried on by other means'.[9] Procedural justice allows us to co-exist in fundamental disagreement with each other, without feeling we must resort to violence in order to be heard. But what are the characteristics of procedural justice that facilitate this state of affairs?

Justice as procedure

According to Hampshire, procedural justice possesses two essential elements: first, 'a universal rational requirement of two-sidedness'; second, 'respect for locally established and familiar rules of procedure'.[10] The former appeals to our innate sense that a procedure isn't fair if it ignores one or more sides of an argument, while the latter provides an agreed and customary forum in which adversaries can be heard, rather than an alien forum imposed on them. Regarding the former, Hampshire asserts that:

> Uniting all humanity, from the nursery to the grave, the practice of promoting and accepting arguments for and against a proposal is taken as the core of practical rationality. The procedure is as well recognised and respected as the procedure of counting, and as unavoidable.[11]

Hampshire notes elsewhere that prudential and moral rationality is a 'common human possession or potentiality', a quality most clearly evident in the just and fair weighing of

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[8] It is worth noting that Hampshire's view is different from Rawls' in being more narrowly procedural and not presupposing a well-ordered democratic society. As Hampshire wryly argues, 'political liberalism includes a definite, although incomplete, conception of the good which prevails principally among free-thinking liberals in politically sophisticated societies' [*Innocence*, 188].

[9] Alasdair MacIntyre, *After Virtue*, 2nd ed. (London: Duckworth, 1985) 252-253.

[10] Hampshire, *Justice*, 97.

[11] Hampshire, *Innocence*, 53.

conflicting points of view.[12] The attraction of Hampshire's thesis lies in its appeal to commonly accepted views and practices, but his evidence for it is questionable. He argues that each of us tries to balance pros and cons, and resolve contrary pulls and impulses, in our own minds, and that this inner process of hearing all sides of an issue is analogous to the resolution of political conflicts.[13] Justice and fairness are achieved not in matters of substance – by, say, imposing what one group thinks is a 'just' regime over the citizenry – but in matters of procedure.[14] But does a person's inner conflict/dialogue constitute an appropriate analogue for public debate?

Inner and outer

Hampshire does not agree with the Cartesian paradigm of a solitary thinker attempting first to resolve her inner arguments and thereby understand the world, and from this inner debate she is equipped to engage in public debate. Instead, Hampshire reverses the paradigm. He postulates that:

> we learn to transfer, by a kind of mimicry, the adversarial pattern of public and interpersonal life onto a silent stage called the mind. The dialogues are internalized, but they still do not lose the marks of their origin in interpersonal adversarial argument.[15]

It is of course in childhood, and usually within family relationships, that we first encounter interactions such as asserting, contradicting, deciding, approving, blaming and so on. The

[12] Hampshire, *Justice*, 40. It is noteworthy that ideas of fairness may be more ingrained than we usually think. For example, anybody who owns two or more cats or dogs will (or should) know that their pets possess an acute sense of what is fair or unfair. A famous study by Frans de Waal and Jason Davis showed that monkeys not only understood fairness but also protested against unfairness ['Capuchin cognitive ecology: cooperation based on projected returns', *Neuropsychologia* 41(2) (1 January 2003) 221-228]. It is possible that most higher animals possess the capacity to recognise a basic level of fairness. However, what looks to us like a capacity for recognising fairness might be more accurately, and less anthropocentrically, described as an evolved ability of individual animals to get enough to eat without causing conflict within the group.

[13] Hampshire, *Justice*, 40-42.

[14] Ibid., 4.

[15] Ibid.,11-12.

child 'soon finds no difficulty in a solitary imitation of these exchanges'.[16] In short, Hampshire attempts to avoid the Cartesian 'prison' of inner dialogue as a prerequisite for public speech, but in avoiding Descartes he runs headlong into the opening argument of Wittgenstein's *Philosophical Investigations* (*PI*).

The *PI* begins with a refutation of St Augustine's idea that children learn to speak by observing adults as they gesture towards an object and utter a word that the child infers is the name of that object.[17] This echoes the above quote from Hampshire about children learning adversarial argument. According to Wittgenstein, this schema produces a very limited understanding of language. In particular, it leads us to think that words name or stand for objects and that sentences are combinations of names, and that the overriding purpose of language is to communicate our inner thoughts. However, it overlooks the myriad different ways in which we use language. Wittgenstein illustrates his contention with the example of sending someone to shop for him. He gives that person a slip of paper on which is written 'five red apples'. This person gives the written order to the shopkeeper:

> who opens the drawer marked 'apples'; then he looks up the word 'red' in a chart and finds a colour sample next to it; then he says the series of elementary number-words – I assume he knows them by heart – up to the word 'five', and for each number-word he takes an apple of the same colour as the sample out of the drawer.[18]

Wittgenstein uses this bizarre example to show that, even in a primitive statement consisting only of names, each word is used differently. The shopkeeper might store apples in a drawer marked 'apples', but he would not, for example, store colours or numbers in drawers marked 'colours' or 'numbers'. And why would he look up a colour chart to check what 'red' is, and

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[16] Ibid., 12.

[17] Ludwig Wittgenstein, *Philosophical Investigations,* 4th ed., G. E. M. Anscombe trans., P. M. S. Hacker & Joachim Schulte trans and eds (Chichester: Blackwell, 2009) #1. In #32, Wittgenstein argues that Augustine's description is more like somebody going to a foreign country and trying to learn its language. This person already speaks a language, but not the new one. This is very different from a child learning to speak. The child does not have pre-linguistic thoughts she is endeavouring to enunciate. Rather, her thoughts and language develop inseparably as manifestations of her immersion and growth in a complex cultural and linguistic community.

[18] Ibid., #1.

why does he enunciate the numbers? 'Apple', 'colour' and 'number' are all nouns, but clearly they are used very differently. Wittgenstein is drawing our attention to the fallacy that for every noun there must be an 'occult appearance' of that object in the mind.[19] I do not need to compare 'red' with a colour chart in my mind when one in my hand would do just as well or even better. I do not need to compare an apple with its image in my mind when I can simply go to the drawer labelled 'apples', and I do not need to compare five objects with an equivalent collective in my mind when I can merely enunciate the numbers in order and stop selecting apples after I say 'five'. Moreover, there is no personal connection – tone of voice, look of acknowledgement et cetera – between the person who wrote the order and the shopkeeper; this is language at its most basic and impersonal. The words on Wittgenstein's slip of paper do not convey a state of mind but rather have a function – to achieve a purpose that makes sense only within a complex linguistic community in which there is a system of cardinal numbers and in which 'red' and 'apple' have broadly agreed referents and uses. Moreover, there is no deeper meaning to be uncovered: to ask what 'five' means in this example is superfluous and misleading – 'no such thing was in question here, only how the word "five" is used'.[20]

Returning to Hampshire, the point of this is to show that our notions of justice are not innate in the sense that, if I declare a procedure or situation is 'just', I do so by comparing them with an image of justice in my mind – one consisting, for example, of balanced debate and hearing all sides. Of course, I *might* conduct such an inner comparison, but (as we have just noted) a written checklist of attributes would serve just as well. 'Justice', therefore, does not function as 'the name of an object that each of us identifies when we look inwards'.[21] If it did, and if we all possessed different concepts of justice (which would be unsurprising) then we would find it almost impossible to discuss justice. However, we *are* able to discuss and debate it because 'justice' has a meaning and use in ordinary language and discourse that we all learn and in which we all participate. This does not require that we agree on the meaning of justice, or that it has a core denotation or essence which is common to all meanings and uses of the word. It is rather that we are able to use 'justice' in ways which make sense within

[19] The term 'occult appearance' is Wittgenstein's from *The Blue and Brown Books* (Oxford: Basil Blackwell, 1960) 4.

[20] Wittgenstein, *PI*, #1.

[21] Marie McGinn, *Wittgenstein and the Philosophical Investigations* (London: Routledge, 1997) 163.

the discourse at hand, a sense that arises in and is inseparable from the linguistic and cultural milieu in which we live. Conversely, Hampshire's notion of procedural justice probably requires that the meaning of 'fair' in discussion includes the idea that various claims on us and/or the community are not discounted solely on the basis that we don't agree with or like them.

Wittgenstein's argument also disposes of Hampshire's assertion that 'discussions in the inner forum of an individual mind naturally duplicate in form and structure the public adversarial discussions'.[22] There need be no analogue between what is going on in my mind and what is happening in public dispute. Indeed, most of us could probably name a number of people who possess little or no sense of inner conflict because their epistemic narcissism does not admit other points of view.[23] We don't have to possess acute psychological insight to make this observation. Hampshire himself notes that processes such as adjudicating, deliberating and so on have 'both a public and inner mental use' and that the latter is 'best explained through reference to the observable public activities'.[24] In short, there are plenty of people whose evident general obtuseness and unwillingness to acknowledge other points of view suggest they would reject Hampshire's minimalist position.

The above problems undermine Hampshire's appeal to our common experience of resolving inner conflict, but the idea of procedural justice is possibly more secure without it. By not appealing to shared experience and/or agreed ideas of justice, procedural justice is based on nothing more than the principle that all sides should be heard because justice is unlikely to be realised if somebody's voice is deliberately excluded. It is important, however, that this principle not be regarded in essentialist terms as a *sine qua non* of justice.

Justice and systemic silence

Procedural justice is a robust default position, but does not entail that 'hearing all sides' means the same in every situation or for every matter. If one side has been systemically silenced, then an appeal to hearing all sides may be a cunning subterfuge to entrench existing

[22] Hampshire, *Justice*, 9.

[23] President Trump is an obvious example.

[24] Hampshire, *Justice*, 7. Or, as Wittgenstein put it, 'an "inner process" stands in need of outward criteria' (*PI* #580).

injustice. As Rae Langton rightly asserts, 'the ability to perform illocutionary acts can be viewed as a measure of authority, a measure of political power'.[25] The hitherto silent party has an opportunity to speak, but does not possess the illocutionary power enjoyed by its oppressor and is therefore more likely to experience illocutionary disablement than receive justice if that oppressor is granted an additional voice. The example of domestic violence is instructive. If a man murders his wife and children, justice requires that the deceased have a voice such that their account – how they were living in constant fear but were unable to flee, for example – is heard, but justice is (probably) not served by hearing the man's point of view. In this case, hearing the other side is tantamount to giving the perpetrator (whether alive or dead) a further opportunity to justify his actions.[26] The only thing we want to hear from or know about him is information that might help prevent a similar crime, such as signs of pathological narcissism. In this instance, 'hearing all sides' should be better construed as giving a voice to the silenced and affording them a forum in which their locutions are neither frustrated nor disabled.

There is a parallel here to the debate about climate change. The requirement to hear all sides in a debate about the reality of global heating is particularly amenable to the contra side because it reinforces the perception that an argument exists, thereby deflecting attention from addressing the problem. Further, this requirement might exacerbate the problem of dialogic 'indulgence', where parties go to great lengths to give everybody a fair hearing and weigh their opinions equally, 'even when everyone involved in the conversation knows there are substantial differences in competence between them'.[27] In a situation where heeding expert advice is vital, listening to incompetent opinion is procedurally bankrupt.

Innate fairness or innate aggression?

One obvious objection to Hampshire's thesis is the idea that our innate sense of fairness might be significantly less universal and compelling than, say, an innate tendency to aggression, and therefore the fairness-based international cooperation required to address climate change is less likely than conflict over it. Konrad Lorentz, for example, famously

[25] Langton, 'Speech acts', 316.

[26] The title and content of Jess Hill's *See What You Made Me Do* (Carlton, Victoria: Black Inc., 2019) are appropriate here. I say 'further' opportunity because the male already possessed illocutionary power.

[27] Tom Nichols, *The Death of Expertise* (New York: Oxford University Press, 2017) 64-65.

asserted that human behaviour is inherently aggressive towards other human beings, particularly those in other clans or groups. Lorentz postulated that if observers from another planet were to study human behaviour they would never think that our behaviour was 'dictated by intelligence, still less by responsible morality'. They would observe a great deal of irrational conflict, but be unable to explain what was going on. According to Lorentz, human social behaviour is 'subject to all the laws prevailing in all phylogenetically adapted instinctive behaviour', and we know about those laws from studying the instincts and behaviour of animals. For example, rats (like humans) 'are social and peaceful beings within their clans, but veritable devils towards all fellow-members of their species not belonging to their own community'.[28] If this were explained to our interplanetary observers they would probably conclude that human beings are indeed innately aggressive because this instinct is the best explanation for their proclivity to fight one another.

Lorentz's theory is persuasive, largely because it matches our own perceptions of human history as a succession of wars, quarrels and so on.[29] Indeed, we might even think it surprising if somebody who witnessed the horrors of World War II (Lorentz served as a medic in the German Army) did not conclude that human beings are inherently nasty to each other. Hampshire himself was of this view,[30] but he regarded it as less fundamental or important to the human condition than procedural justice. The best illustration of this contention is World War II and its aftermath. Allied countries fought an aggressive war for the rational purpose of defeating aggression – mainly Germany's and Japan's – and when hostilities ceased they conducted forensic trials in order to prosecute some of those responsible for war crimes. The point is that aggression, conflict and even genocide were ultimately submitted to the jurisdiction of procedural justice, to the degree that both sides –

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[28] Konrad Lorenz, *On Aggression*, Marjorie Latzke trans. (London: Methuen, 1966) 203-204.

[29] And, of course, periods of peace and cooperation are less memorable than wars.

[30] It is worth noting that Hampshire served in army intelligence during the war and he interrogated leading Nazis immediately after it. The most infamous of Hampshire's interrogations was of Ernst Kaltenbrunner, a leading perpetrator of the Holocaust. He was the highest ranking surviving member of the SS. Hampshire's experience of Kaltenbrunner and Nazism, combined with post-war revelations about Stalin's tyranny, convinced him that human capacity for evil is as natural and innate as its capacity for generosity and sympathy. In short, Hampshire developed his ideas about procedural fairness while being fully aware, as few of us could ever be, of humanity's capacity for unmitigated evil. See Hampshire, *Innocence*, 7-8.

prosecutors and defendants – were heard and judgement delivered according to a broadly familiar set of rules and precedents.[31]

The Nuremberg trials possessed several characteristics of procedural justice that appealed to, or were significant of, a universal sense of fairness. First, even before the war ended there had been worldwide desire for leading Nazis to be 'tried by law and suffer condign punishment', as opposed to a sometime British proposal – several other nations proposed much the same – to execute the most hated Nazis without trial.[32] A corollary point was that the trials represented the authority of a large group of nations, not merely one country. Second, all trials, particularly the main trial, were conducted in public: justice was seen to be done (the main trial was filmed) and the tribunal wanted as many people as possible to see it. Third, though German opinions of the trials were generally negative (as one would expect) few could deny that defendants were given a fair hearing.[33] Fourth, since there was little precedent for a war-crimes trial, procedures were based on the broadly familiar protocols of criminal trials. Fifth, a schedule of possible crimes was drafted according to universally accepted minimal values such as not waging wars of aggression and not killing civilians. The Nuremberg trials were far from perfect – for example, Telford Taylor was of the view that Rudolf Hess was incompetent to stand trial[34] – but they demonstrated that procedural justice could achieve broadly fair outcomes even where it had to be imposed – the German justice system having been thoroughly corrupted[35] – and where most parties had to compromise some of their ideals.

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[31] As it happened, the tribunal's determination to observe the forensic rules and protocols established for these trials meant that some leading Nazis, like Walter Funk (economics minister) and Albert Speer (armaments minister), escaped the death penalty they probably deserved.

[32] Telford Taylor, *The Anatomy of the Nuremberg Trials* (London: Bloomsbury, 1993) 634.

[33] It is noteworthy that Otto Kranzbuehler, defence counsel for Karl Dönitz, approved of the general purpose of the trials even though he was critical of some of the tribunal's procedures and new laws, particularly the crime against peace [Taylor, 627-635].

[34] Taylor, 536-537.

[35] The German legal system's degradation under Nazism has been demonstrated by Ingo Müller in *Hitler's Justice*, Deborah Lucas Schneider trans. (Cambridge, MA: Harvard University Press, 1991). Müller completely debunks the myth that Germany's judiciary did not acquiesce to the Nazi regime.

Institutions of fair adversary reasoning

Unlike immediate post-war Germany, most countries possess institutions which can preserve the bond of fair dealing between people, even though that bond is often weak and likely to fail when both sides of a conflict are passionately prosecuted. There are ardent loyalties on both sides, but is there an '*overriding* loyalty that will preserve the institutions of fair adversary reasoning when they are tested in a bitter conflict of values? … Any political philosophy needs to have an answer to this question.' Hampshire's view is that the answer resides only in institutional loyalties, in our 'deep-seated habits of living together and arguing together'.[36] In modern nation-states, this role is best filled by a long-established constitution and its concomitant institutions. In the United States, for example, this role falls to the Supreme Court. Nobody assumes that its decisions are infallibly just, but everybody is held to assume that its procedures are just in that they conform to the basic principle of adversary reasoning – that both sides are heard equally.

United States Supreme Court

Hampshire's thesis seems sufficient, but what happens when the revered, or at least broadly accepted, institution reneges on this basic principle? The example of America's Supreme Court is instructive. In 2000, the country's presidential election was held on 7 November. In Florida, the ineptitude of America's electoral system descended into farce: many people cast their vote for the wrong candidate, and thousands of votes were unable to be counted because voting machines malfunctioned. On 12 December, the U.S. Supreme Court reversed a decision of Florida's Supreme Court, thereby terminating a recount of contested votes in Florida and allowing the vote certification of 26 November to stand.[37] In this certification, George W. Bush was just 537 votes ahead of Al Gore. The Supreme Court's decision entailed that Bush received Florida's 25 Electoral College votes, which gave him one more than the 270 votes need to win office. Across the country, Gore won the popular vote by over half a million. In effect, the court's decision threw out Florida's 60,000 contested votes and disenfranchised the 51 million citizens who voted for Gore. As Vincent Bugliosi stated:

[36] Hampshire, *Justice*, 94 (my italics).

[37] It is noteworthy that *Justice is Conflict* was published in 2000, so the manuscript was completed before this decision. It is interesting to speculate whether it might have caused Hampshire to modify his views.

> the Court committed the unpardonable sin of being a knowing surrogate for the Republican Party instead of being an impartial arbiter of the law. … [The] institution Americans trust the most to protect its freedoms and principles committed one of the biggest and most serious crimes this nation has ever seen – pure and simple, the theft of the presidency.[38]

Hampshire would probably agree, because the Supreme Court's decision was clearly not based on a fair hearing of arguments, or on 'commonly and customarily accepted ideas of substantial justice', or on precedent.[39] It is unsurprising that the Court's decision was self-contradictory: in purporting to preserve the fundamental right to vote it decided that some votes did not count. Hampshire asserts that when either of the two criteria for procedural justice – the rational requirement to hear all sides, and respect for venerable rules and custom – are violated then 'we should expect catastrophe'.[40] The Supreme Court's dereliction of judicial impartiality satisfies both criteria. It is here, though, that Hampshire's thesis is less helpful: how can a society forestall the moral decay that might lead institutions to abandon procedural justice?

Sovereign evil

Procedural justice is oriented to prevention of wrongdoing rather than pursuit of a specified good. With this in mind, Derek Edyvane goes a step further and suggests that civic virtues should be regarded not in affirmative terms, such as cultivating a catalogue of aspirational values and commitment to a certain view of social good, but rather in preventive terms – as the repudiation of sovereign evil.[41] According to Edyvane, sovereign evil is not simply the absence of goodness; it is an entity in and of itself, a state of affairs which cripples a society's capacity to formulate aspirational values. Sovereign evil has catastrophic consequences because aspirational morality is fundamental to the pursuit of a fulfilling and whole life. Ergo, a society should endeavour to cultivate the habits, dispositions and qualities

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[38] Vincent Bugliosi, *The Betrayal of America* (New York: Thunder's Mouth Press / Nation Books, 2001) 41, 48.

[39] Hampshire, *Justice*, 96.

[40] Ibid, 97-98. President Trump's appointment of Brett Kavanaugh to the Court in 2018 – an alleged sex offender nominated by a self-confessed sex offender – further undermined the Court's declining reputation.

[41] Derek Edyvane, *Civic Virtue and the Sovereignty of Evil* (New York: Routledge, 2013) 10 and passim.

that its citizens require if it is to avoid moral calamity. Echoing Hampshire, Edyvane is keen for citizens to be aware of and appreciate the complexity of modern societies in which there are irreconcilable values and moral conflicts. His view is that 'uncertain times call for uncertain citizens' – *uncertain*, not paralysed when confronted with competing moral claims.[42] Edyvane wants us to be sufficiently uncomfortable such that we are prepared to acknowledge the defects and costs in the value choices all of us must make.

Tension between aspiration and prevention

The inevitable tension between aspirational and preventive activity is exemplified in political life: the former activity aiming at realisation of ideals, the latter directed towards prevention of evil. It follows that any realistic notion of public virtue will inevitably be a compromise between or uneasy fusion of those conflicting impulses. Within that context, Edyvane attempts to answer the following: what if moral and religious conflict, and their attendant uncertainty and insecurity, are now enduring features of public life?[43] If they are then we need an interpretation of civic virtue that neither exacerbates nor fails to address those conditions. The dilemma for contemporary politicians and public figures is confronting. Their customary response to uncertainty and insecurity is (naturally enough) to cultivate certainty and security, but almost inevitably this will promote aspirations that will compete against the values which produced the conflict in the first place. In short, the customary response will exacerbate the situation. What is required is politically counter-intuitive: a disposition to acknowledge that uncertainty and insecurity are intrinsic to the complexity and sheer difficulty of citizenship, and a willingness to afford procedural justice to parties which many of us might regard as largely responsible for our uncertainty and insecurity. These counter-intuitive dispositions manifest the civic virtues of citizens who are equipped to resist sovereign evil, whose outlook is robust enough to sustain anxiety about conflicting moralities, and who are reluctant to embrace wholeheartedly any set of aspirational values.

Avoiding evil rather than striving for good

There is a further counter-intuitive element in Edyvane's thesis. As Hans Jonas argued, the trajectory of moral philosophy from Socrates onwards has largely been about striving for

[42] Ibid., 145.

[43] Ibid., 134.

the good, whereas a better guide to action would be striving to avoid the bad.[44] In other words, our fears may be a better guide to action than our desires. The reason for this is straightforward: it is usually much easier for us to perceive evil than good. Evil is more confronting and compelling; it can impose itself on us without our looking for it, and there are fewer differences of opinion about it. Good, on the other hand, is often unobtrusive and unperceived until we have cause to reflect on it. We know when evil comes or way, but good often passes by unnoticed. We are usually quicker to decide and more certain about what we do *not* want than about what we want.

With regard to climate change, Edyvane's and Jonas' views appear entirely relevant. We might disagree about good values to live by and societal goals to pursue, but almost all of us can agree that global heating is an evil that should be avoided. The question is, why don't we make more efforts to avoid what we agree is evil? The answer lies in those characteristics that make evil easy to perceive: it is confronting, compelling, obtrusive and so on. For the most part, global heating lacks these characteristics. It is subtle, slow-moving and distant, not a gun in one's face but more like a distant threat that, though real, is something we feel we can adapt to. In short, the problem with climate change is that, while it fits our *ideas* about evil, it is much less congruent with our *perceptions* of evil.

Contemporary fora of non-debate

Edyvane's notion of civic virtue goes some way to preventing moral decay and concomitant injustice, and endorses Hampshire's concept of procedural justice, but both invite questions about the appropriate fora in which their preventive orientations might thrive. Dialogue entails debate, and proper conduct of debate requires engagement with another party's ideas, but at present most countries have political systems that preclude such engagement. Instead, debate is transmuted into personality contests or culture wars. Reasoned analysis of issues is subordinated to false antitheses and infantile hyperbole and stereotyping. For example, the jobs and wealth created by opening a new coal mine are vastly exaggerated; concern about climate change is dismissed as the preoccupation of 'latte-sipping, inner-city trendies' rather than 'people from the real world'; and without coal-fired

[44] Hans Jonas, *The Imperative of Responsibility*, Hans Jonas & David Herr trans. (Chicago: University of Chicago Press, 1984) 27, 233.

power your lights will go out.[45] Some of this degradation of debate is due to the professionalization of politics and party demands to 'stay on message', but some is also the result of social media.

The electronic agora

Social media exacerbates one of the main challenges faced by democratic governments. Joseph Schumpeter noted that the efficiency of governments was impaired by the 'tremendous loss of energy' caused by incessant battle waged by political leaders both within parliament and outside it.[46] Much of the extra-parliamentary battle was conducted in the press, but Schumpeter was writing in 1942, well before the demands of current all-day news cycles. Their insatiable hunger for news imposes additional burdens on politicians, whose own perceived need to engage with social media imposes even more. Moreover, social media gives politicians almost instant feedback on a policy or decision, a situation that promotes instant gratification – for both the electorate and policy makers – over long-term priorities. Schumpeter's simile for a political leader remains starkly relevant: 'a horseman who is so fully engrossed in trying to keep in the saddle that he cannot plan his ride'.[47]

On the other hand, the internet provides a platform for otherwise voiceless people, thereby enabling openness and democracy. However, while facilitating transparency, the internet and social media are also 'empowering the rule of the mob'. Instead of fostering openness and tolerance, they have 'unleased such a distasteful war on women that many no longer feel welcome on the network'.[48] What about the #MeToo movement's rise to prominence in 2017? The late Ann Snitow's views are instructive. She strongly supported #MeToo but also feared it had directed attention towards the crimes of individual high-profile perpetrators rather than the need for systemic change, and had intensified 'the richly recurring

[45] Andrew Clark, 'Joyce doubles down on climate change as an elitist issue', *AFR Weekly* (30-31 March 2019). The views and quote are from former deputy prime minister Barnaby Joyce.

[46] Schumpeter, *Capitalism*, 286.

[47] Ibid., 287.

[48] Andrew Keen, *The Internet is Not the Answer* (London: Atlantic Books, 2015) xiv. Keen appositely notes that the internet has massively enriched 'a tiny group of young white men', indicative that many traditional bases of power – particularly race and gender – remain unchanged.

hatred of women who speak'.[49] There may be a common theme here. Most people entertain an assortment of views in private that they would be reluctant to air in public. The demands of public civility and propriety, and perhaps a vocational requirement to exhibit impartiality, entail that one's views about certain people or groups remain private. For some individuals, however, the private realm is that in which they indulge the fantasies, hatreds and irrationalities they would be loath to express publicly, except within discrete gatherings of like-minded people. The internet, particularly the dark web, provides such people with a forum in which they can broadcast their views anonymously, without having to leave their private realm, without the constraints of public civility, and without the penalties – social and legal – such views might attract. A misogynist tract of hitherto limited and local circulation can now be fed instantly to an international audience, while a women's support site can be attacked from anywhere with impunity. In short, the internet has facilitated the public flourishing of private demons. It is unsurprising, for example, that President Trump uses social media as his primary means of communication. For a person who is keen to air his private views and cares nothing about public censure, social media is his natural haunt.

Part of this public flourishing of private opinion is driven by the internet's 'fantasy of secession from the real world' and of 'magically floating outside space and time' because it is not confined to physical locations and not governed by local jurisdictions.[50] Even the words we use to describe the internet and its functions – cloud, cyberspace, global village and so on – evoke a placeless, de-located entity that pervades everywhere but resides nowhere. The internet allows me to communicate anywhere at any time with people I don't know but who share my views, and to comment on situations I have never experienced and on matters I might know little about. Hubert Dreyfus notes the eagerness of internet users to respond to the 'equally deracinated opinions of other anonymous amateurs who post their views from nowhere'.[51] Rather than taking a stand on an issue that affects my milieu, being practically committed to it and willing to bear the consequences of that commitment, I can be an armchair activist whose commitment involves little or no cost, no risk and no responsibility.

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[49] Ann Snitow, 'Talking Back to the Patriarchy', *Dissent* (Spring, 2018) 88. She was right: enforced stay-at-home regulations during the Covid-19 pandemic produced a rise in domestic violence, despite recent and well-publicised successes of #MeToo.

[50] Keen, 203, 215.

[51] Hubert L. Dreyfus, *On the Internet* (London: Routledge, 2001) 79.

None of this is inevitable: the internet, the blogosphere and social media are neither devil nor saviour. They can, however, amplify things already present, whether for weal or woe.[52] The #MeToo movement is a paradigm of the internet's capacity to empower women who had long been isolated and powerless. In this instance, the internet's ubiquity was harnessed to cast light on and confront a ubiquitous crime. For the most part, however, as your engagement with the internet and social media increases so your involvement in the physical world and physical interactions tends to decline.[53] The outcome is a shrinking sense of one's 'being in' the world. Each of us is born into and inextricably immersed in a pre-existing world, and our notions of reality, purpose and meaning are generated from our social, intellectual and physical interactions within that world. We are 'located' beings no matter where we are or go to, so anything that undermines our intrinsic locatedness almost invariably enfeebles or muddles our sense of reality, purpose and meaning. Further, as Martin Heidegger asserted, the basic feature that constitutes all our involvements in the world is 'care' (*sorge*).[54] Heidegger does not use 'care' as a psychological term – in the sense of worry, 'cares of the world' and so on – but rather as an ontological term to describe our unavoidable relationships with the people, entities and things that make up our world. We have an ontological care *about* these things, and *for* people, because, as they make up our world, any diminution of that care is also a diminution of our being.[55] The internet can expand our epistemological world, but can also contract our ontological world.

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[52] As David Smith put it, the internet has become 'a defining feature of American politics: an incubator of both social activism and rancid tribalism' ['After a repentant Trump voter's one-man protest, what happened next?', *The Guardian* (22 August 2020)].

[53] Dreyfus, 102. Dreyfus' view has been confirmed by subsequent research. The effects of high internet usage are similar to those of an addiction: reduced socialization and impoverished work and life efficiency [Mari K. Swingle, *i-Minds* (Gabriola Island, BC, Canada: new society publishers, 2016) xvi].

[54] Dorothea Frede, 'The question of being: Heidegger's project' in *The Cambridge Companion to Heidegger*, Charles Guignon ed. (Cambridge: Cambridge University Press, 1993) 63. Heidegger developed the concept of care in *Being and Time*, Joan Stambaugh trans., Dennis J. Schmidt rev. (Albany: State University of New York Press, 2010) I.2 #12-13 and I.6 #41-42.

[55] It is worth noting that Heidegger's concept of care did not include Jews. He saw Jewry as the archetypal de-located people and therefore an ontological threat to the German Volk. As Pierre Bourdieu rightly argued, Heidegger's antisemitism was 'sublimated as a condemnation of rootlessness' [*The Political Ontology of Martin Heidegger*, Peter Collier trans. (Cambridge: Polity Press, 1991) viii].

There is a related problem: the limitless range of information on the internet, and the search engines needed to comb through it, entail that browsers must be highly selective in what they want to see, thereby tending to reinforce existing points of view.[56] Moreover, the trivial and fanciful is presented alongside the substantial and genuine. An instructive example is the widespread and enduring belief that America's moon landings were faked.[57] As Richard Godwin observed, it took 400,000 employees and contractors of NASA to put 12 men on the moon, but just one to spread the rumour it was a hoax.[58] This disparity manifests an epistemic imbalance that has existed for millennia but is exacerbated by the internet: a single person can propagate a dubious idea, but the internet furnishes him or her with an instant and almost unlimited audience. Any hare-brained idea can attract its true believers, but few of us are willing, or have the time and energy, to enter those bizarre and increasingly numerous realms in order to disprove claims that are patent nonsense.[59] Moreover, by addressing an absurd claim you inadvertently give it energy, but if you don't address it you might allow it to metastasize.

Covid-19 infodemic

The Covid-19 pandemic cast further light on this problem. As Sylvie Briand, WHO's director of Infectious Hazards Management, stated, every pandemic is accompanied by a 'tsunami of information', a wave accompanied by misinformation and rumour. She notes that this situation existed in the Middle Ages, 'but the difference now with social media is that this

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[56] More insidiously, Safiya Umoja Noble notes the phenomenon of 'algorithmic oppression' whereby racism and sexism are reinforced by web-search results. She found that 'racism is a standard protocol for organizing behavior on the web' [*Algorithms of Oppression* (New York: New York University Press, 2018) 4-5].

[57] For example, 16% of Britons believe the moon landings were either 'definitely' (4%) or 'probably' (12%) staged [Victoria Waldersee, 'Which science-based conspiracy theories do Britons believe?', YouGov.co.uk (25 April 2019)].

[58] Richard Godwin, 'One giant ... lie? Why so many people still think the moon landings were faked', *The Guardian* (12 July 2019). The one man was Bill Kaysing, who had once worked in the rocket industry. In 1976, well before the rise of social media, he self-published *We Never Went to the Moon*. Its enduring influence is due largely to the internet.

[59] As Aristotle sagely noted, there cannot be a demonstration of everything, and it shows lack of training or education not to recognise things for which demonstration may or may not be demanded. A person who refuses to exercise reason in this regard is 'no better than a mere plant' [*Metaphysics* IV.4 (1006a)].

phenomenon is amplified; it goes faster and further'. As the Director-General of WHO put it, 'we're not just fighting an epidemic; we're fighting an infodemic'.[60] Why, though, does the internet aggravate this perennial problem? After all, misinformation and rumour spread no more quickly on the internet than correct information. Part of the problem is simple chronology. To reconsider the Apollo program, one's belief that the program was a hoax is neither time-critical nor deadly, but one's belief that Covid-19 is a hoax, or that eccentric treatments are effective, could prove fatal. To put it another way, we have always needed time and energy to assess epistemic claims from any source, but a pandemic substantially reduces the time in which we can do so and concomitantly increases the penalty for getting things wrong. The problem is made worse by mainstream media, which now has a large degree of cross-over with social media, thereby reporting some of the more egregious examples of misinformation.

A forum for dialogue

Is the internet a forum for dialogue about climate change? At least one objection to it can now be rejected. The internet was thought to aggravate the problem of 'echo chambers' – the tendency of people to select only content that reinforces their beliefs and to share those beliefs only with like-minded people. It was feared that this phenomenon would exacerbate the division between those who are informed about politics and those who are not, thereby increasing political and ideological polarization. To the contrary, Elizabeth Dubois and Grant Black found that, while online echo chambers clearly existed, their usual participants were neither interested in politics nor users of diverse media by which they could check sources or discover new information. Importantly, they comprised only about 8 per cent of the population.[61] The internet probably has increased the number of echo chamber inhabitants, but only marginally.

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[60] John Zarocostas, 'How to fight an infodemic', *The Lancet*, vol. 395 (29 February 2020). Briand was referring to misinformation and rumour accompanying outbreaks of the Black Death. The infodemic is particularly acute in Latin America, where social media networks are awash with conspiracies, sham cures and disinformation [Tom Phillips et al., 'Tsunami of fake news hurts Latin America's effort to fight coronavirus', *The Guardian* (26 July 2020)].

[61] Elizabeth Dubois and Grant Black, 'The echo chamber is overstated: the moderating effect of political interest and diverse media', *Information, Communication & Society*, vol. 21, no. 5 (2018) 729-745.

On the other hand, there is now little doubt that digital media are affecting users' neurophysiology. As Mari Swingle found, high levels of internet use result in higher neurophysiological arousal: 'our brains are speeding up, but not in a good way'.[62] The consequences include diminished ability to observe everyday things and sustain focus on them, and reduced capacity to integrate information and be creative. Further, altered brain states affect the way we socialize: 'the neurophysiological processes that regulate mood and behaviour are deregulating'.[63] In other words, our heavy and increasing use of the internet is compromising some of the characteristics we need – such as patience, cooperation, creative use of new information, and longer attention spans – if we are to address climate change.

Some of this might account for the observation that searching the internet can result in an inflated sense of how much users know about a subject. Tom Nichols describes it as an electronic version of the Dunning-Kruger effect: the least competent among those who search the web for information are also least likely to realise how little they are learning.[64]

Embodied communication

The Covid-19 pandemic demonstrated the value of, and our dependence on, the internet. Schools and universities were able to maintain adequate teaching schedules, and businesses were, to varying degrees, able to operate. However, businesses and teachers generally find that online meetings and teaching require more preparation, and are more exhausting and less effective, than physical meetings and classroom teaching.[65] This is because effective (and affective) communication is embodied; it requires observation of, and appropriate responses to, dozens of social cues and rituals. Some of these are preserved on Zoom, but much more is lost. We have evolved, and been socialised, to perceive these cues, so when they are curtailed we find communication not only more difficult but also more enervating. Loss of conversational nuances, and concomitant effort to search for non-verbal signals, mean that 'virtual interactions can be extremely hard on the brain'.[66] Telephone conversations are less

[62] Swingle, xviii.

[63] Ibid. xix.

[64] Nichols, 119.

[65] They also find that men talk over women more than they usually do in face-to-face meetings.

[66] For a brief discussion see Julia Sklar, '"Zoom fatigue" is taxing the brain. Here's why that happens.', *National Geographic* (24 April 2020).

tiring because we cannot see the other person and therefore do not search for visual cues to complement the message, and because we realise we do not have to supply anything other than verbal cues to our interlocutor.

Further, online visual communication is nearly deaf and blind to mood. Those who teach or talk to groups are aware of 'mood' in a room: heads nodding slightly in agreement or disagreement; bored looks or body language when the material is uninteresting; the teacher adjusting her or his body movements and location in the room – consciously or not – in order to emphasise certain points or change the dynamic of discussion.[67] As Hubert Dreyfus noted, 'mood governs how people make sense of what they are experiencing. Our body is what enables us to be attuned to the mood.'[68] Given that constructive dialogue about any significant and contentious matter requires, as a bare minimum, that participants be highly attuned to nuances of mood and message, it is unlikely that virtual will replace physical meetings to address climate change.

On the other hand, without social media, movements such as Black Lives Matter would have neither the catalyst (camera-phone recordings) nor energy (generated largely through online discussion and organisation) to bring crowds onto streets in America and elsewhere. Could a similar effect be achieved for climate change? Probably not, because social media do not overcome the psychological hurdles that impede attempts to address global heating. Racism is personal, immoral, confronting and present, whereas climate change is impersonal, distant and much less confronting. Almost all of us contribute to climate change, but we are not thereby (normally) regarded as immoral, though even if we were this would be a much lower level of immorality than racism and therefore not generate an equivalent sense of outrage.

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[67] David Blair, lecturer in linguistics at Macquarie University, made this observation to Hubert Dreyfus [Dreyfus, 59-61]. Plato would agree. In the *Meno*, for example, Plato uses dialogic mood to anticipate the indictment against Socrates [94e-95a].

[68] Ibid, 60. Dreyfus is drawing on the concept of 'embodied perception' advanced by Maurice Merleau-Ponty. For example, in *Phenomenology of Perception* he states, 'It is my body which gives significance not only to the natural object, but also to cultural objects like words' [*Phenomenology of Perception*, Colin Smith trans. (Abingdon: Routledge, 2002) 273].

Excursus – Conspiracy Theories, Fake News and Postmodernism.

As I write, various websites are spreading conspiracy theories about the dangers of vaccination, the 5G network, and Democrat paedophiles. President Trump is asserting that plain facts, such as the number of people who have succumbed to Covid-19, are merely part of the liberal press's attempts to undermine him. Who or what is to blame for this lunacy? Many blame the internet, but some blame should be directed at the legacy of postmodernism. For example, postmodernism's fundamental attitude is scepticism towards 'grand narrative' – that is, narratives that purport to offer a comprehensive explanation of what happened in the past or how the world works. Marxism is one example. The flip-side of this scepticism is that scientific and historical accounts have to compete against other narratives and interpretations of phenomena or events. No account or narrative is regarded as having an intrinsically better claim to acceptance than any other. Science is seen as the 'meta-narrative of the dominant culture'.[69] Its pretentions to investigate and describe reality are dismissed as unfounded hubris.

Postmodern attacks on mainstream science have themselves been attacked. *Intellectual Impostures* by Alan Sokal and Jean Bricmont is probably the best-known demonstration of postmodernism's failure to understand science. Notwithstanding, as Christopher Butler notes, postmodernism has 'very much changed the way in which the scientific disciplines are perceived within American and European culture, towards a more sceptical, and politicized, view'.[70] Examples to support Butler's contention are easy to find. For instance, senior American educators William Cobern and Cathleen Loving assert that:

> In today's schools there are often competing accounts of natural phenomena, especially when schools are located in multicultural communities. There are also competing claims about what counts as science …

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[69] Shawn Otto, *The War on Science* (Minneapolis: Milkweed, 2016) 194.

[70] Christopher Butler, *Postmodernism: A Very Short Introduction* (Oxford: Oxford University Press, 2002) 42, and see 14-15 and 37-43 for a succinct account of postmodernism and science. For a wide-ranging introduction to postmodernism see John McGowan, *Postmodernism and Its Critics* (Ithaca: Cornell University Press, 1991) 1-30.

> Western science would co-opt and dominate indigenous knowledge if it were incorporated as science. Therefore, indigenous knowledge is better off as a different kind of knowledge that can be valued for its own merits [and] play a vital role in science education …
>
> [I]f science is deemed universal it not only displaces scientific pretenders such as creation science, it also displaces any local knowledge that conflicts with it.[71]
>
> The task for educators is to develop curricula that value knowledge in its many forms and from its many sources.[72]

These views are representative of curricula rationale throughout Anglophone countries; little wonder that their citizens are confused about the claims and roles of science. My folk remedy for Covid-19 might clash with your scientific virology, but they represent 'competing accounts' and both should be valued. Your claim that western science is superior to folk remedies can be dismissed as a standard hegemonic manoeuvre to dominate and repress cultural knowledge.[73]

Cobern and Loving were pursuing the laudable aim of preserving indigenous knowledge, but they have things the wrong way around. They accuse science of hegemony, but fail to recognise its anti-authoritarian value. For example, I accept that the Grand Canyon was formed over millions of years, and that it reveals geological strata laid down over hundreds of millions of years, but only a century and a half ago I would have acceded to the church's authority and said it was formed about 6,000 years ago in the biblical flood. In this matter it was science, particularly Charles Lyell's *Principles of Geology*, that undermined the church's authority. Am I not, then, merely replacing one authority with another? Not at all. The church made authoritative pronouncements on geology because it possessed *intrinsic* authority based on tradition and scripture, whereas scientific geology makes authoritative

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[71] William W. Cobern and Cathleen C. Loving, 'Defining "Science" in a Multicultural World: Implications for Science Education', *Science Education*, vol. 85, no. 1 (2001) 51-52.

[72] Ibid. 63.

[73] Of course a folk remedy might be effective, but science can explain why. The authority of the remedy's proponent is irrelevant to its virological success.

pronouncements because it has accrued *extrinsic* authority based on its explanatory success. The difference is stark, and is predicated on the assumption of an objectively existing physical world. Questions of fact about it are decided through observation and testing, not by appealing to an authoritative body or tradition with no scientific credentials.

Indeed, any hegemony a scientific field might possess is most likely to be challenged by new findings within that field. For example, we usually think of medicine as a paradigm of western scientific success, but until the late 1800s or early 1900s going to the doctor was usually more dangerous than the condition for which one sought a cure. As David Wootton rightly states, 'for 2,400 years patients have believed that doctors were doing them good; for 2,300 years they were wrong'.[74] Part of the problem was rigid adherence to Hippocratic tradition about 'unhealthy humours' causing disease of internal organs. The basic Hippocratic inventory of remedies continued to underpin medical practice until the mid-1800s.[75] These therapies were ineffective at best, fatal at worst. The authority of medicine's 2,300-year-old tradition was finally overturned from within, by practitioners and scientists who questioned its assumptions.

Cobern and Loving have conflated epistemology with ideology. All scientists work within a given cultural context, so it would be unsurprising if their motivation or choice of research subject reflected that context. However, it is a fallacy to then assume their results necessarily reflect that context.[76] As Simon Blackburn argues, aircraft stay aloft because we are getting something right about nature,[77] and the physics of aerodynamics apply independently of political or cultural context.

Cobern and Loving's program will not validate the knowledge of kids from multicultural backgrounds: rather, it is more likely to hinder them from participating in broader scientific discourse.

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[74] David Wootton, *Bad Medicine* (Oxford: Oxford University Press, 2007) 2. Wootton adds, with commendable restraint, 'I think it is fair to say that historians of medicine have difficulty facing up to this fact.'

[75] Ibid., 35.

[76] The fallacy of 'bourgeois genetics' was discussed in chapter 3.

[77] Simon Blackburn, *Truth* (London: Penguin, 2005) 176.

Conclusion

Hampshire's idea of procedural justice provides a sound, almost bedrock, foundation for dialogue: if parties can't agree that all sides have a right to be heard then we probably have no basis for dialogue. And if one party has been systemically silenced, then 'hearing all sides' is in practice a demand for that party to have a voice. There remains, however, a fundamental question: what is dialogue and why are we so poor at it? In keeping with the hermeneutic strategy of fusing ancient and modern horizons, we now turn to the foundation of our dialogic tradition – the dialogues of Plato – in order to illuminate our modern predicament.

Chapter 10

Out of the Agora: Plato's dramatic settings

Overview

The fusing of hermeneutic horizons not only entails that modern dialogic failure can be elucidated by examining Plato's dialogues, but also that the views and questions we bring to Plato are informed by this failure. This chapter looks at *how* Plato uses dialogue, focussing on his works' dramatic settings. Understanding these settings, and the characters who populate them, is vital in both interpreting a dialogue's philosophical content and discerning the dynamics of discussion. This study uses prosopography and dramatic interpretation to demonstrate the interdependence between literary and philosophical readings of Plato. In particular, we find that Plato abandons the agora as a place in which philosophy is pursued, and that his treatment of public and private dialogues is very different. The aim of this chapter is to prepare the ground for developing a list of dialogic characteristics that can throw light on where and how modern dialogue has gone wrong.

Socrates in public: possible areas of discourse

Most of Plato's dialogues, the Socratic dialogues[1] in particular, display some or all of the characteristics of a dialogic forum: they are open-ended, they challenge dogma rather than reinforce it, and they are not dismissive or authoritarian. In particular, most of the dialogues are set in public. Xenophon's description of Socrates is apposite:

> Socrates was always in the public eye. Early in the morning he used to make his way to the covered walks and the recreation grounds, and when the agora became busy he was there in full view; and he always spent the rest of the day where he expected to find the most company. He talked most of the time, and anyone who liked could listen.[2]

In this work Xenophon defends Socrates from charges – corrupting young people and not believing in the city's gods – that led to his trial and execution. Xenophon portrays Socrates

[1] 'Socratic dialogues' are those in which Socrates interrogates an interlocutor about a viewpoint, assumption, meaning of a concept and so on.

[2] Xenophon, *Memorabilia* 1.1. Xenophon knew Socrates and was about 30 when Socrates died.

as a public philosopher whose private opinions were consistent with those he maintained in public.[3] Since no-one ever saw Socrates do, or heard him say, anything that would have justified his indictment, the charges were clearly false. Though there are fundamental differences between Plato's and Xenophon's renderings of Socrates – for example, Xenophon's Socrates never professes ignorance – both are consistent in portraying Socratic philosophising as a public activity. It is, therefore, surprising to discover that only one of Plato's dialogues is set in the agora – the civic centre of Athenian life – and even then the setting is narrowly identified as 'the portico [*stoa*] of the King Archon'.[4] Only Athenians would know that this portico stood at the northern end of the agora. Given that most of Plato's dialogues are set in public, and he acknowledges that Socrates frequented the agora,[5] why was Plato so reluctant to specify it as the scene of his dialogues? The answer to this question is important: public spaces are not all the same. Some are more, and some less, conducive to dialogue, while others are burdened by their histories and become antithetical to dialogue.

The Athenian agora

An agora was the gathering space where the public life of any polis – its quotidian social, political, legal and commercial activities – took place. As Jacob Burckhardt lyrically put it, no dictionary translation of the verbal form (*agorazein*) can adequately convey 'the delightful leisurely mixture of doing business, conversing, standing and strolling about together'.[6] In Athens, the agora was also where the *boule* (the Council of 500 citizens) convened. The agora was a sacred area; its boundary was defined by marker stones and buildings. In Athens these buildings included law courts, magistrates' offices and the *bouleuterion* (in which the Council met).[7]

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[3] Plato also maintains this view. In the *Apology*, Socrates states that his private and public opinions are the same, so anyone who testifies to the contrary is lying [33b].

[4] *Euthyphro* 2a.

[5] For example, Socrates states that the language he will use before court is the same as the language he uses in the agora 'where many of you have heard me' [*Apology* 17c], and in the opening scene of the *Gorgias*, Socrates says he arrived late because he was lingering in the agora [447a].

[6] Jacob Burckhardt, *The Greeks and Greek Civilization*, Sheila Stern trans. (New York: St Martin's Press, 1998) 52.

[7] Richard Allan Tomlinson, 'Agora', and Jon McKesson Camp, 'Athens, topography' in OCD, 42-43, 205-206.

For Plato, however, the agora is where Socrates was condemned to death on false charges. Moreover, Socrates was peculiarly ill-suited to be a denizen of this political, legal and commercial hub of the city. Socrates engaged in as little political activity or civic duty as would have been possible for an Athenian citizen;[8] before his trial he had never been before a law court; and he was notoriously careless about material goods and his own lack of wealth. Further, Plato did not want to portray Socrates, who was indicted for heresy, as challenging the views of prominent Athenians within a sacred area. Indeed, Plato is so keen to distance Socrates from the agora that he puts the following in his mouth:

> The philosopher grows up without knowing the way to the agora, or the whereabouts of the law courts or the council chambers [both are in the agora] or any other place of public assembly [*Theaetetus* 173d].

The context is a digression about the unworldliness of a true philosopher – who also would never dream of attending dinners or parties[9] – but if this vignette were accurate then Socrates himself – habitué of banquets and the agora – could not be a philosopher. Given that, so far as Plato is concerned, Socrates is the paradigm philosopher, what is going on here? Ruby Blondell rightly observes that Plato's depiction of an ideal philosopher in the *Theaetetus* has evident similarities to *and* striking differences from the portrait of Socrates across the broader corpus of dialogues.[10] The philosopher is embodied and earth-bound, but his mind soars above it; he spends time in the agora, but not for commercial, legal or political purposes; he attends banquets, not to indulge in dissipation but to expatiate on the nature of love. In a complex dialogue about the characteristics of knowledge, the overall effect of this digression is 'a vivid expression of the fact that human epistemology cannot be explored in abstraction from who we are as complex beings at the juncture of the material and the divine'.[11]

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[8] In his famous funeral oration, Pericles states that Athenians 'are unique in the way we regard anyone who takes no part in public affairs: we do not call that a quiet life; we call it a useless life' [Thucydides 2.40].

[9] *Theaetetus* 173d.

[10] Ruby Blondell, *The Play of Character in Plato's Dialogues* (Cambridge: Cambridge University Press, 2002) 298-300.

[11] Ibid., 302

Blondell's is an insightful reading of *Theaetetus* and several other dialogues, but she does not notice Plato's reluctance to set his dialogues in the agora.[12] Further, though she is correct in observing that many of Socrates' conversations take place in private houses, she does not also observe that Plato's dramatic setting of these dialogues can leave little doubt that he regards philosophy as a public activity, *not* as something pursued in a private or domestic setting. Plato's dramatic aversion to the agora[13] sits uneasily with his view that philosophy is done in public, but both are important facets in locating Socratic philosophy in its various settings.

The Academy

Plato sets a number of dialogues in wrestling schools (*palaistrai*) and gymnasia: *Theaetetus, Sophist* and *Statesman* are set in an unnamed gymnasium; *Lysis* in a palaestra just outside the east wall of Athens; *Charmides* in the palaestra of Taureas; and *Euthydemus* in the Lyceum. All were public spaces, though not as bustling or significant to Athenian life as the agora. Gymnasia began as sites for physical training, but increasingly became intellectual centres. The Academy – home of Plato's 'school' from about 383 – and the Lyceum – home to Aristotle's from about 335 – were gymnasia. Why, though, does Plato not set any dialogue in the Academy? After all, long before it became the site of Plato's school, Socrates must have discussed philosophy there on numerous occasions. *Lysis* even notes he had been in the Academy and was on his way to the Lyceum when he was intercepted by a group from the wrestling school. The probable answer is that Plato saw the Academy as a place where philosophy was taught and cultivated, mainly through critical discussion, but 'doing' philosophy was, for the most part, a public activity.

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[12] So far as I am aware, nobody else has noticed this reluctance.

[13] This aversion is sometimes obscured in translation. For example, the opening lines of *Menexenus* in Paul Ryan's translation are:

> Socrates: Where is Menexenus coming from? The market place?
>
> Menexenus: Yes, Socrates – the Council Chamber, to be exact.

In the Greek text, however, Socrates' first words are *ex agoras* ('from out of the agora'). And just to make sure we get the message, Menexenus' first words are also *ex agoras*. Ryan has, unintentionally, erased Plato's very specific dramatic directive that this dialogue has nothing to do with the agora. Given that *Menexenus* consists largely of a commemorative funeral oration – which is of course a public event – Plato's directive has interpretive significance.

Plato's retreat into privacy, or into teaching?

Brian Donovan argues that Plato withdrew from teaching in the Academy's public gymnasium into his private garden next door, which is why his school continued to be called the Academy. This separation of Plato's school from the city was significant of his abandonment of the ideal that philosophy's role was to teach *arete* (goodness, excellence) to denizens of the polis.[14] According to Donovan, Plato's departure from the position that teaching *arete* is a philosophical priority was one of his most important legacies to the modern university. Donovan is partly right, but mainly wrong.

To begin, the notion that Plato moved from a public area into his private domain is speculative; we don't know much about his earliest school, certainly not enough to support Donovan's assertion. More importantly, the dialogues themselves supply ample evidence to the contrary. Plato was traumatised by the failure of Socrates' public mission to challenge taken-for-granted views about virtue, piety and so on. The Socratic gadfly became too irritating to be tolerated. In order that philosophy should avoid provoking further martyrdom, Plato probably did conclude that the business of philosophy was not primarily about frequenting public spaces – especially the agora – to challenge the norms and opinions of citizens. Nor, however, was it about withdrawal into esoteric privacy, or about wandering from one city to the next like a sophist. Rather, Plato wanted to educate people who, 'by nature as well as by training … take part in both philosophy and politics at once'.[15] The dialogues formed part of a student's training for public and philosophical life, and most of the dialogues are expressions in the Socratic spirit of philosophy being done in public.

Donovan is not alone in failing to notice the clear difference between Plato's treatment of dialogues set in public and those with private, indoor settings. For example, Donovan regards *Protagoras* as 'probably the most comprehensive *locus classicus* on the ideal and reality of the city as moral school',[16] yet he fails to observe that most of it is set indoors. The setting alone precludes Donovan's assessment.

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[14] Brian R. Donovan, 'The City and the Garden: Plato's retreat from the teaching of virtue', *Educational Theory* (Fall 1995, vol. 45, no. 4) 453.

[15] *Timaeus* 19e-20a.

[16] Donovan, 457.

Philosophy as literature and literature as philosophy

At this point it is appropriate to recall the importance of location in Plato's works. We usually think of Platonism in terms of body-soul dualism, eternal verities not constrained by time or place, and so on, but these doctrines should not obscure the significance of setting and characterisation in the dialogues. Michael Frede is right in arguing that the dialogues are not philosophy in disguise, not merely a literary device for presenting philosophical views and argument in a vivid and accessible way.[17] Rather, the dialogue form itself, and the dramatic settings and characters of individual dialogues, are shaped primarily by philosophical rather than literary considerations.

It is probably no coincidence that most of the spurious dialogues attributed to Plato but almost certainly not by him – such as *Demodocus*, *Epinomis*, *Halcyon*, *Hipparchus* and *Minos* – have no dramatic setting.[18] It is likely that Plato's imitators regarded dramatic details as superfluous and were unaware of their intrinsic importance to matters under discussion. These details are not window dressing with which the author has garnished the narrative. Rather, they colour how we think of and approach the various characters, themes and discussions. Of course, a dialogue can be read without consideration of its dramatic setting, but to do so is to abstract participants and arguments from their locations. Instead, Plato clearly wants his reader to understand that philosophy cannot be conducted in abstraction from places and people.

For Plato, Socrates is *the* dramatic vehicle of philosophical activity. The dialogues are imaginative constructs, but Socrates is a real person, in familiar concrete situations with interlocutors who are usually drawn convincingly and who demand to be taken sympathetically or seriously by the reader. It is worth illustrating the implications of this contention by examining a couple of Plato's Socratic dialogues.

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[17] Michael Frede, 'Plato's Arguments and the Dialogue Form' in *Methods of Interpreting Plato and his Dialogues*, Oxford Studies in Ancient Philosophy, Supplementary Volume 1992, James C. Klagge and Nicholas D. Smith eds (Oxford: Clarendon Press, 1992) 219.

[18] *Theages*, another spurious dialogue, *is* set in the agora (in the portico of Zeus), which shows that the author was unaware of Plato's deliberate dramatic withdrawal from the agora.

Charmides

This dialogue is a good example of the necessity to engage with prosopography when reading Plato's texts; failure to do so will often result in a deficient or even misleading interpretation of what is going on. The subject of discussion is *sophrosyne* (temperance or self-restraint). Charmides himself, Plato's uncle, is in this setting a beguilingly attractive teenager with whom Socrates conducts his elenchus (the type of dialectical cross-examination for which Socrates is famous). The other interlocutor, Critias, recommends Charmides as highly distinguished in body and soul. Any adequate construal of the dialogue requires the reader to know that Critias became leader of the Thirty Tyrants and that Charmides was appointed by the Thirty to govern Piraeus. Both were killed in a battle against democratic forces in 403 BCE. Both were the antithesis of *sophrosyne.*

The dialogue's structure is significant. It is narrated by Socrates, but there is no dramatic audience: he is speaking directly to us. Whereas in some dialogues, such as *Parmenides*, Plato keeps the reader/listener at arm's length, in *Charmides* there is no intermediary. It is a dialogue within a monologue. In effect, we are the interlocutors, so at every turn in arguments about the definition of *sophrosyne* we are being asked for our opinion. For the reader there is no escape: Plato demands our participation.

The dramatic setting is also significant. Socrates has just arrived back in Athens after almost three years away with the army in the Potidaean campaign. This war began as an Athenian invasion and then degenerated into a prolonged but ultimately successful siege of Potidaea. However, the army then suffered defeat in a battle near Potideae, a disaster referred to at the beginning of Socrates' narrative [153b-c]. Socrates does not mention, though the reader is assumed to know, that he distinguished himself in this battle when he saved the life of Alcibiades.[19] All of these details are important. Socrates has survived a long military campaign, including a brutal pitched battle, and he is an exemplar of *sophrosyne* (in this context, self-possession and admirable conduct), but the man he rescued, and the two men with whom he is in discussion, are incapable of this virtue. Indeed, the dialogue ends with an ominous reminder that, if Critias and Charmides decided to use force in any undertaking, they could not be resisted [176c-d]. Battle-hardened Socrates, embodiment of virtue, hailed in

[19] Alcibiades was a flamboyant aristocrat and ambitious demagogue. Plato has Alcibiades describe this event in the *Symposium* [220e].

public by enthusiastic admirers [153b], is no match for the political forces arrayed against him.

Meno

Unlike most of Plato's works, this dialogue has no specified dramatic setting.[20] The first words are a question by Meno: 'Can you tell me, Socrates, whether virtue is teachable?' [70a]. Meno was wealthy, renowned for his physical beauty, and a thorough scoundrel. According to Xenophon, Meno 'prided himself on his ability to deceive, the fabrication of lies, and the mocking of friends'.[21] Plato presents Meno's question as an entry to the dialogue. The answer, which the reader/auditor supplies as a resounding 'No!' given the questioner's identity, is not uttered. Rather, it is provided by the informed listener, Plato's deft insertion of an unstated viewpoint into the dramatic framework.

This dialogue also introduces the character of Anytus, the most prominent of three men who brought charges against Socrates. Anytus is the son of Anthemion, who became rich not through luck or someone's gift but through his own wisdom and diligence. He was well-mannered and not full of himself [90a]. He gave Anytus a good upbringing and education, 'as most Athenians believe, for they elect him to the highest offices' [90b]. Socrates' praise of Anytus is backhanded: he is not the man his father was, and in any case the opinion of most Athenians is worthless given that within a few years they will back Anytus in condemning Socrates. Further, Socrates pursues a point of timeless relevance: there are and have been many people who are good at running the city, 'but have they really been good teachers of their own virtue as well?' [93a]. After all, the matter under discussion is whether virtue is teachable, so did these good citizens know how to pass on the virtue they evidently possessed, or is it something that can't be passed on? [93b]. Socrates cites examples of renowned Athenians – Themistocles and Pericles among them – with sons who, though skilled in some things, were not as good and wise as their fathers. The implication, again, is that Anytus is not, and indeed cannot be, the equal of his father. In short, both Meno and Anytus embody the impossibility of teaching virtue.

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[20] The only other genuine dialogues without a specified setting are *Philebus*, *Ion* and *Cratylus*. Like *Meno*, they are set in unspecified public spaces.

[21] Xenophon, *Anabasis* II.6.26. Meno met a nasty end (though Xenophon thought it appropriate) by being captured following a failed military expedition and then tortured for a year.

Anytus' contribution to the discussion finishes with a veiled threat to Socrates [94e]. The dialogue concludes with Socrates' plea to Meno to persuade Anytus about the things he (Meno) has learned so that Anytus' anger might be allayed, which would be beneficial to Athens [100b-c] in that Socrates might not be condemned. The idea that Meno might persuade anybody to better behaviour is risible, and forms an appropriate parallel bookend to Meno's opening question.

Meno is a compelling illustration of the way Plato conducts philosophy as an interplay between dramatic details and general ideas. His inquiries into goodness and other desirable traits are both hypothetical and concrete, general and specific, and neither dominates nor excludes the other. This dialogue's dominant themes – what is virtue, and can it be acquired or taught? – are mediated through discussion with two men who notoriously lacked virtue. Plato's choice not to use characters who themselves manifested virtue was deliberate. He does not resolve questions about virtue, but the dramatic setting is a confronting reminder that if virtue were teachable then Athens would not have condemned Socrates.

In terms of general ideas, *Meno* is philosophically productive compared with other Socratic dialogues. For example, it articulates 'Meno's paradox' [80d-e],[22] and the idea of gaining knowledge through 'recollection' [81e-86a],[23] and the view that 'true opinions' are equally beneficial as knowledge so long as they are tethered to the mind by 'reasoning out the cause' [98a].[24] However, none of this is allowed to outweigh the defective characters of Meno and Anytus. Plato does not let us forget that, while virtue might be granted by divine dispensation [99e], and philosophical speculation might pursue general truths, the exercise of virtue and the conduct of philosophy are inseparable from individuals in specific situations.

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[22] The paradox is that you can't search for something if you don't know what you are searching for, but if you did know then you wouldn't need to search for it.

[23] Noam Chomsky refers to the *Meno* when discussing his theory that 'certain aspects of our knowledge and understanding are innate' [*Language and Problems of Knowledge* (Cambridge, MA: MIT Press, 1988) 3-4]. Socrates famously interrogated Meno's slave about geometry in order to demonstrate how knowledge gained in a previous existence can be recollected. Incidentally, Chomsky regards this as the first recorded psychological experiment.

[24] Aristotle also associated *episteme* (knowledge) with an apprehension of *aitia* (cause). After discussing the matter, Jonathan Barnes concludes that 'both Plato and Aristotle made a number of mistakes about knowledge' [*Proof, Knowledge, and Scepticism* (Oxford: Clarendon Press, 2014) 72].

Good ideas and theories do not exist in a social vacuum: their efficacy depends on the right people being in the right situations.

Dialogues *not* set in public

We have already referred to Plato's different treatment of indoor and public dialogues, but in what ways are they different? The next section examines a selection of dialogues, beginning with those set inside private dwellings: *Parmenides*, *Symposium*, *Timaeus* and *Critias*, *Republic*, and *Protagoras*. Only the last-mentioned is a Socratic dialogue, albeit only in part. *Crito* and *Phaedo* are unusual in being Socratic dialogues not set in public. However, their subject matter, and Socrates' philosophical life narrative, demand they be set inside the prison in which he awaited death. We are not looking so much at the philosophical substance of each dialogue as the ways by which Plato uses interior locations to express and frame the ideas he is addressing. Again, Plato is showing that dramatic setting is fundamentally important to the ways in which philosophical dialogue is conducted.

Parmenides

This dialogue begins in the agora, but after a brief greeting and inquiry about a discussion between Socrates, Parmenides and Zeno that took place years before, the interlocutors leave to find Antiphon, who can relate the discussion from memory. The rest of the dialogue is set in Antiphon's house. Plato is very clear that this dialogue does not take place in the agora. Even Antiphon is described as having left the agora 'to go home just a short time ago' [126c]. In short, all participants have gone from the agora into a private dwelling. Indeed, the dialogue is located doubly indoors: Antiphon relates a philosophical conversation that took place in the house of Pythodoros.

The whole dialogue is narrated directly to us (listeners/readers) by Cephalus (not the Cephalus of the *Republic*), who heard it from Antiphon, who heard it from Pythodorus, who heard some of it. Plato goes to great dramatic length to ensure we are at several removes from the conversation. Therefore, though Cephalus addresses us, we are not participants in this important and complex work in which Parmenides questions a young Socrates about his theory of eternal and immutable 'forms'.

It is appropriate that, in so challenging a dialogue, Plato demonstrates his awareness of the difficulties which a complex matter might engender. For example, he observes that most

people regard philosophical hypothesising – in this instance, considering all sides of a matter and speculating about the consequences – as 'idle talk', and do not realise 'that without this comprehensive and circuitous treatment we cannot hit upon the truth and gain insight' [135d, 136e]. Moreover, after reaching some sort of agreement about a matter, it might be necessary to 'go back again to the beginning to see whether things will appear the same to us as they do now, or different' [163b]. In other words, if a group has settled on a point of view through discussion and debate, perhaps it should revisit the original problem to see if it comes up with the same view. And just in case it thinks this is adequate, 'let's go back to the beginning once more' [165e] to see if participants have truly understood the matter.

This dialogue is a paradigm of philosophical integrity and modesty. Plato subjects his archetypical philosopher, Socrates, and one of his pet theories – the 'forms' – to genuine criticism by Parmenides, an esteemed older philosopher who also directs the course of discussion. In modern terms, this might be the equivalent of a dialogue written by Ludwig Wittgenstein in which he subjects his ideas about private language to interrogation by Bertrand Russell. Plato was prepared to challenge his own ideas – and using Parmenides to articulate the challenge shows Plato was in earnest – but the criticism was kept impersonal and at arm's length so that the matter under discussion could be rigorously and profitably examined. The dramatic setting strongly suggests this is a dialogue for private pondering and discussion, not public participation.

Symposium

This dialogue is Plato's artistic masterpiece, but its complicated construction is part of a deliberate strategy to detach the message from its author, narrator and audience. It is narrated by Apollodorus, who was present at Socrates' trial and was the most emotional of those who witnessed Socrates' death.[25] Plato's choice of narrator reminds us that this dialogue, replete with life and genius, is nonetheless framed by Socrates' death.

Apollodorus is asked by a friend to describe the proceedings of a banquet that was held some years beforehand. Apollodorus was not at the banquet; he received his account from Aristodemus, who was present, and Apollodorus had asked Socrates to confirm some of the details in Aristodemus' account. From the outset, therefore, the narrator is deliberately

[25] *Apology* 38b; *Phaedo* 117d.

positioned at some remove from his account. Moreover, whatever pretensions to social status or narrative objectivity Aristodemus might have had are undermined by Apollodorus' description of him as 'a little fellow, always barefoot … one of Socrates most devoted admirers' [173b]. Further, Aristodemus fell asleep towards the end of the evening, and when he awoke was too drowsy to remember the arguments in which Socrates was then engaged [223]. Clearly the accuracy of Aristodemus' account is questionable, a point Plato reinforces by describing Apollodorus' character in a way that does not recommend him as a reliable narrator [173c-e].

Even Socrates' speech during the banquet is not his own; rather, it is 'the account of Eros I once heard from a Mantinean woman, Diotima' [201d]. Diotima is very probably a fictitious character, so Plato could have described her as a resident of any Greek polis. His choice of Mantinea is instructive because it was the site of a momentous battle between the Hellenic states in 418, just two years before the setting of this banquet. The irony of a speech on love from an inhabitant of Mantinea would not have been lost on Plato's auditors.

The narrative structure of the *Symposium* leads inexorably to the speech of Alcibiades, who 'gate-crashes' the party with Dionysian recklessness and whose speech is a paean to Socrates. Plato's readers need no reminding that Alcibiades was an ambitious, dazzling demagogue who was murdered at the request of Athenian tyrants in 404. They also know that, like Socrates, he was charged with impiety. Within the dramatic context of the *Symposium*, Alcibiades is a tainted man: it was largely his ambition that drew Athens into a coalition that was defeated by Sparta at Mantinea. The reference to Diotima is, therefore, doubly poignant.

The timing of Alcibiades' arrival – immediately after Socrates' discourse, so Alcibiades hears none of it – underpins the dramatic purpose of his speech: Socrates was not responsible for Alcibiades' political rashness and deceit. Moreover, they are completely different characters. Alcibiades is already drunk when he arrives, whereas Socrates, well known for being able to maintain sobriety, remains unaffected by his voluminous consumption of festive wine. Alcibiades laments that Socrates resisted his amorous advances: in a scene that resonates with Socrates' trial, Alcibiades calls on the banqueters to act as judges of Socrates' hubris [219c]. Both men were charged with impiety, and Socrates also with corrupting the young, of which Alcibiades was the most notorious example. Plato leaves readers in no

doubt that Socrates was not responsible for Alcibiades' behaviour; indeed, his self-indulgence was despite Socrates' influence. Further, Plato uses this episode to convey his tacit support for the Socratic quest for definitions. If both Alcibiades and Socrates were charged with impiety, but their actions and beliefs were fundamentally different, then the Athenian authorities stand condemned by Socrates' own method because clearly they do not know what impiety is.

Plato demonstrates his commitment to philosophy as a public activity by locating the banquet *inside* a private dwelling. In order to attend, Socrates must withdraw from the public sphere in which he normally conducts his philosophical dialogues and enter into the private realm of Agathon's house. After drinking and arguing all other guests under the table, he departs and resumes his regular daily activities in public [223d]. The only elenchus in the *Symposium* is a brief interrogation of Agathon himself, whose victory in dramatic composition, a considerable achievement for a dramaturge of his youth, was the reason for their celebration. In other words, Agathon has just been publicly acclaimed and is the only person present who has not had to withdraw into somebody else's private realm. Within the context of Plato's dramatic structure, Agathon is the only suitable candidate for Socratic interrogation. Further, this elenchus occurs immediately before, and acts as a preamble to, Socrates' own speech. It is Plato's avowal that the elenchus is an essential and inextricable element of Socratic philosophy and that, even if one withdraws into a private space, the philosophical spirit of Socrates cannot be evaded. Finally, this elenchus closes with a statement that may, in this later work, serve as Plato's valedictory on Socratic questioning: it is not difficult to contradict Socrates, but one cannot contradict the truth [201c].

Republic

Though Socrates is the key figure in this dialogue, it is set not in Athens but in Piraeus, the port that served Athens, located slightly less than five miles from the city itself. Moreover, the setting is indoors, in the house of Cephalus, an aged acquaintance of Socrates. This very atypical setting for a Socratic dialogue is instructive: Socrates is not only well away from his usual Athenian public habitat but is also in a private realm. Plato's listeners would have been aware that Piraeus had been (and remained[26]) the strongest centre of Athenian democracy, to the degree that it became the focus of resistance to the tyranny of the Thirty in

[26] According to Aristotle [*Politics* 1303b10].

404/3.[27] The cosmopolitan character of Piraeus was evident in its being home to a large number of metics – freeborn foreigners who were not Athenian citizens but who were allowed to reside in Athens and its surrounds, usually by paying a tax. Cephalus is himself a metic. Given the high proportion of inhabitants from elsewhere it is not surprising that Piraeus was also home to a number of foreign cults, including those of Isis and Bendis. The latter was a Thracian goddess.[28] Bendis is important in the *Republic* because the dialogue opens with Socrates beginning his return to Athens after having walked to Piraeus to attend a festival in her honour: Socrates' devotion to the gods is not limited to Athena.

Plato has constructed an opening scene in which every detail informs our reading of the remainder. To begin, it is important to note that the *Republic* is not itself a dialogue; it is Socrates' recollection of a long series of dialogues from the day before. However, Plato does not provide another party to whom Socrates relates these events and discussions, so there is no sense in which the reader/auditor can 'listen in' to Socrates regaling a companion with his account. No citizen of any polis is being addressed: instead, Socrates is speaking directly to the reader/auditor. We are being invited, or challenged, to think about the matters raised. Further, Socrates' narrative recollection does not itself have a dramatic setting; Socrates is speaking from nowhere. In a dialogue about the ideal city-state, Plato's deliberate strategy not to locate the framing narrative suggests that the ideal polity is also nowhere. Moreover, by concluding with Socrates' rendition of the myth of Er – in which justice outweighs injustice in both this life and the afterlife – Plato pulls the dialogic carpet from beneath us. A constitution for the ideal city may be the subject of never-ending discussion, but it must be grounded on an unchallenged belief that 'the soul is immortal and able to endure every evil and also every good, and always hold to the upward path' [621c].

The first word in the *Republic* – κατεβην (*kateben*, 'I went down', from the verb *katabaino*) – immediately sets the tone for the remainder. In Greek epic poetry, for example, the opening word is usually important because it both seizes the audience's attention and declares the matter at hand. In the *Iliad*, the first word is μηνιν (*menin*, 'wrath'), which not only establishes the subject matter – the wrath of Achilles – but also captures the listener's attention. With *kateben*, Plato is (quite literally) providing a direction for the dialogue:

[27] For more details see Robert S. J. Garland, 'Piraeus', OCD, 1185.

[28] Ancient Thrace occupied the area that is now Bulgaria, northern Greece and north-western Turkey.

Socrates went down to Piraeus. Moreover, the word anticipates the famous allegory of the cave in book 7 (514a-518c).[29] In this allegory, the prisoner who is released and taken upwards out of the cave in order to see reality, thereafter returns, out of pity for his fellow prisoners, back down (καταβας, *katabas*, also from *katabaino*) into the cave. However, having returned to his original place, this man appears ridiculous because he can no longer compete against the others at identifying shapes in this world of shadows. The other prisoners would say that this man's eyes had been dazzled and ruined by his journey upwards, so if anyone tried to free the remaining prisoners they would kill that person. With one word, therefore, Plato has set the *Republic* against the background of Socrates' death. Socrates is the philosopher who has ascended to glimpse reality and is now on a hazardous (and eventually fatal) mission in the earthly realm of shadows.

There is a further point: *kataben* might inform our reading, but it is hardly a resounding call to attention (unlike, for example, a dramatic shout of 'Wrath!'). Indeed, as an opening salvo it carries an element of bathos, but this is clearly deliberate. Plato is suggesting there is nothing glamorous or exciting about the philosophical life. Socrates' mission may take him to philosophise in unfamiliar places that are, literally and philosophically, lower than his comfortable haunts, with people not of his own choosing, whose responses to him vary from meek agreement through to boredom and on to outright hostility. Plato did not intend the opening scene to frame a portrait of how philosophy *should* be conducted but rather of how it *is* conducted.

Protagoras

This is both a complex dialogue and a dramatic masterpiece. It is narrated by Socrates to an unnamed friend. Very early in the morning, Socrates was awoken by his young friend Hippocrates, who asked him for an introduction to Protagoras, the foremost professional

[29] John Sallis thinks that *kateben* also anticipates the myth of Er with which Socrates concludes the *Republic* [*Chorology: On Beginning in Plato's* Timaeus (Bloomington, IN: Indiana University Press, 1999) 23]. Part of the myth describes a judgment of the dead. Those who had been unjust when alive were directed down (*kato*) into the earth to endure the horrors of the underworld [614c]. Sallis is unlikely to be right because in the two earlier references it is Socrates who descends, which is certainly not the case in his narrating of the myth.

sophist. Socrates questioned Hippocrates on what he hoped to achieve by submitting to, and paying for, Protagoras' teaching. Socrates warned Hippocrates about the danger of buying learning from Protagoras or anyone else. Then they depart for the house of Callias, where Protagoras was staying and where the remainder of the dialogue is set.

Every detail in these scenes is carefully contrived. Plato could have presented the entire dialogue in direct speech; once again, the opening scene serves to keep the dialogue at arm's length from the reader/auditor. Socrates' interrogation of Hippocrates sets the framework for his later elenchus with Protagoras, but there is no straightforward correspondence: one should not trust vendors of education, yet Socrates treats Protagoras with respect, neither of them emerges unscathed or victorious from their exchanges, and Plato's portrait of Protagoras is sympathetic and substantial. Socrates observes that 'Protagoras spends most of his time indoors' [311a], an oblique comment on a fundamental difference: Socrates spends most of his time in public. Indeed, even though his narrative is set indoors, Socrates relates it in a public place.

The dramatic setting in Callias' mansion is significant. Callias was a disciple of Protagoras, but was most famous for squandering his enormous inherited fortune, largely on sophists. In a dialogue that largely centres on whether virtue can be taught, Callias personifies the view that it can be neither taught nor purchased. When Socrates and Hippocrates arrive at Callias' mansion, the doorman thinks they are sophists and so slams the door in their face [314d]. Andrea Nightingale rightly regards this as a topos of comedy,[30] but there is more to it. The anticipatory discussion between Socrates and Hippocrates has left readers in no doubt that Socrates is not a sophist. Plato strikes the dramatic middle ground: the doorman is wrong about identity, but right in response – Socrates does not belong inside. Moreover, when Socrates and Hippocrates are finally admitted, they are confronted with an almost farcical tableau. Protagoras is surrounded by acolytes who, with artistic precision, maintain a chorus formation behind him as he walks in one direction, and then another, around the courtyard [315b]. Another sophist, Hippias of Elis, is surrounded by attentive devotees, as is another – Prodicus of Ceos – though he is still in bed.

[30] Andrea Wilson Nightingale, *Genres in dialogue: Plato and the construct of philosophy* (Cambridge: Cambridge University Press, 1995) 6.

Plato populated this dialogue with a broad range of well-known characters. Besides Callias, Plato identifies 14 of those present who attend the three sophists. These details might seem superfluous to the argument, and seem irrelevant for modern readers, but for Plato's contemporaries they provided a rich prosopography to illuminate a dialogue about the possibility of teaching virtue. Among those named are some who committed sacrilege (Charmides, Phaedrus, Alcibiades and Adeimantus); others who were wastrels (Xanthippus and Paralus); one who was renowned for his degenerate passions (Callias, in addition to squandering the family fortune); several who met nasty ends (Alcibiades and Charmides; Xanthippus and Paralus both died of plague); one who was imprisoned for debt (Andron); one who was notorious for political violence (Critias); and some who achieved good reputations (Antimoerus, who was Protagoras' best student, and Agathon the playwright).[31] They provide a panorama of often controversial examples and counter-examples to undermine any preconceptions, let alone conclusions, an auditor/reader might entertain about the acquisition of virtue.

Further, the characters who attend the three sophists constitute an oblique comment on their mentors. For example, both Paralus and Charmides attach themselves to Protagoras – no reputable teacher would wish to be associated with either – but so does Antimoeurus, of whom any teacher would be proud [315a]. Sophists might influence their disciples/students, but Plato clearly rejects the idea that they are responsible for their behaviour – as he rejected Socrates' responsibility for the conduct of some who attached themselves to him. In particular, Critias is portrayed as arriving after Socrates [316a] and as not attached to any sophist: Critias alone is responsible for his political brutality. In a dialogue that debates whether virtue can be taught, Plato's dramatic setting and characterisations form a nuanced backdrop to a question he allows to remain unresolved.

Timaeus and *Critias*

These dialogues form a pair. They are set on the same day, with *Critias* following immediately after *Timaeus*. Socrates plays only a minor role in *Timaeus* and almost no role in *Critias*. The former consists of a speech by Critias (almost certainly not Critias the tyrant) in which he outlines a forgotten account of ancient Athens and the destruction of Atlantis,

[31] For a comparable tableau, a modern reader could insert her or his own contemporary gallery of political opportunists, wealthy misfits, spectacular failures and worthy successes.

and then a long and rhetorically dazzling speech by Timaeus in which he describes the creation of the world. *Critias* consists almost entirely of a long speech by Critias about Athens and Atlantis, the subjects he had earlier anticipated. These works are set on the day after Socrates' has expatiated on the ideal state and its citizens. Most commentators take this to be a reference to the *Republic*, or perhaps the first half of it,[32] but Plato's dramatic setting cautions against this view. Besides Socrates, *Timaeus* features three characters: Timaeus, Critias and Hermocrates. The dialogue begins with a statement by Timaeus that Socrates had been a generous host to the three yesterday, so it is incumbent on them to be as generous in return. However, none of the three appears in the *Republic*, and Socrates could not have acted as host to anybody because he was a guest of Polemarchus (son of Cephalus) in Piraeus.

Further, *Timaeus* is set during the Panathenaea [26e] – the festival in honour of Athen's patron goddess – whereas *Republic* is set during the festival of Bendis, which is two months earlier than the Panathenaea and not held in Athens.[33] There can be little doubt that Plato uses the dramatic setting to segregate *Timaeus* from *Republic* in both time and place.

Further still, Timaeus – who might be Plato's dramatic invention – is described as a citizen of Locri in southern Italy and he is very likely a Pythagorean. Plato uses this character as a mouthpiece for his creation myth; it thereby cannot be attributed to Socrates, or to himself, nor is it discussed or defended. Neither dialogue is a work of philosophy in Plato's usual sense of public argument and participation. Appropriately, therefore, they are located indoors, probably inside Critias' house.

Why is Plato careful to keep *Timaeus* (in particular) and *Critias* at arm's length? The answer might be that the *Timaeus* is, for the most part, a work of theology. One of the charges against Socrates concerned his 'innovating in theological matters'.[34] Always mindful of Socrates' fate, Plato wanted to expound views without the possibility of their being misused against him in an accusation of heresy. The indoor setting precludes any public

[32] For example, A. E. Taylor asserts that '*Timaeus* unmistakably announces itself as in a way a continuation of the *Republic*' [*Plato: The Man and His Work*, 4th ed. (London: Methuen, 1960) 437].

[33] Sallis, 22.

[34] *Euthyphro* 3b.

debate and thereby the possibility of corrupting anyone. It is clear that Plato was not inclined to portray theology as a matter for public discussion.

Further, and more importantly, in these works Plato uses dramatic setting to demonstrate the limitations of dialogue. Dialogue is able to expose slipshod thinking and to clarify matters, but it is much less effective than narrative for introducing challenging ideas or mythologies. In the *Timaeus*, Socrates stands silently aside while Timaeus presents an imaginative and complex aetiological myth in which a divine craftsman (*demiourgos* – demiurge [28a]) imposes mathematical order on chaos; creates human, animal and plant life; establishes the geometry of solids, and so on. In the *Critias*, the eponymous character narrates a primordial myth about the vanished kingdom of Atlantis. In either dialogue, an elenchus would be inappropriate and counter-productive. *Timaeus* challenges a reader's cosmology, and *Critias* demands a vigorous re-interpretation of Athens' past. These are narratives of existential significance and novelty – stories about who we (Athenians) are, where we've come from, and how the world works.

Crito

Alone among Plato's dialogues, *Crito* addresses a matter of practical ethics – whether Socrates should avail himself of his friends' plan to spring him from jail and smuggle him into exile. The prison setting seems appropriate, but it also constitutes a comment on the subject under discussion. The dialogue is about civic justice, but Socrates is the victim of injustice, and prison is as far from civic life and interaction as it is possible to be. Further, he is alone with Crito, and Crito's arguments for accepting the plan are muddled and unconvincing, so Socrates conducts most of the dialogue with the laws of Athens personified as an interlocutor. Ergo, in this matter of civic ethics – which should obviously be a matter of public discussion – Socrates is almost talking to himself.

It is worth knowing, though rarely noted, that Crito was the same age as Socrates;[35] this is a conversation between two old men of about 70 – the life expectancy of a prominent male

[35] *Apology* 33d.

citizen at this time.[36] When Socrates says it would be strange if somebody of his age were to complain about dying [43b], this is also an oblique comment on Crito. When Crito replies that other people of Socrates' age have met similar misfortune but they have not allowed their age to stop them from resenting their fate, we are prompted to ask why Crito doesn't speak about himself. Why doesn't he say that *he* would not accept the injustice that Socrates has suffered and would act accordingly? Plato could have used a much younger and more vigorous man to converse with Socrates, so why did he utilise an unconvincing character who is also near the end of his life? The likely answer is that Plato, who was about 24 when Socrates died, wanted to leave the question unresolved. A man of 70 might accept his fate with equanimity, but the ensuing dialogue – with an old man and then with a personified legal code – is unlikely to persuade a much younger person, even though age should be irrelevant to the logic and outcome of the argument.

The dialogue ends peremptorily and unsatisfactorily: Socrates shuts down the discussion by asserting that the laws' arguments are so loud they drown out any to the contrary, so Crito shouldn't waste his breath [54d] – a very non-Socratic conclusion. Plato is keen to show that Socrates is innocent of the charges against him, and that he punctiliously observes Athenian law, but he deliberately set the discussion in private so that it should not be regarded as a template for resolving issues of civic ethics. Again, Plato is mindful of Socrates' fate.

Probably the most telling argument against exile is the personified laws' assertion that Socratic dialogue can be pursued only in well-governed cities [53b-53d], but these cities regard Socrates as a threat to their constitutions because he leads people astray, particularly the 'young and thoughtless', and makes them question the assumptions that undergird those constitutions. For example, if the laws of a polis are predicated on the broadly accepted assumption that justice means treating friends well and enemies badly,[37] then Socrates' view

[36] Menelaos L. Batrinos, 'The length of life and eugeria [happy old age] in classical Greece', *Hormones* 7.1 (2008) 82-83. Seventy years was the median lifespan for a well-known Greek male (that is, one for whom there is literary or epigraphical evidence) in the 400s to 300s BCE.

[37] A generally accepted view in most ancient societies. For example, Solon (c. 640 - c. 560) prays that the gods will grant him prosperity, and 'to be sweet to my friends, and bitter to my enemies, respected by the first, a terror to the others' [fragment 13.5-6]. In the Old Testament, Psalm 7.4 states (when correctly translated) that 'if I have repaid my ally with treachery or spared someone who attacked me unprovoked'

that a person who is being treated unjustly should not act unjustly in return is clearly upsetting to the social order and contrary to most people's opinion [49b]. As the argument unfolds we are led to the confronting denouement that Plato's paradigm philosopher can neither flee nor has anywhere to flee to.

Dialogues set in public – *Apology*

There is a further complexity. Socrates argues it would be wrong for him to disobey the decision of a legitimate court, yet in the *Apology* he states that if the court were to allow him to live on the condition that he cease philosophising, he could not abide by that ruling: 'so long as I breathe and so long as I am able I shall never stop doing philosophy' because 'this is what the god orders me to do' [29d, 30a]. There is a hierarchy of claims here: the court is legally competent to condemn a person to death, even for spurious reasons, but according to Socrates it is not competent to override a divine command. Plato presents us with, and inverts, a familiar conundrum: we do not think the law invariably judges rightly – a view which itself appeals to a higher concept of right than one manifested by a forensic assessment – but we (and Athenians) usually agree that a court's decision overrules any appeal to divine will. After all, part of a court's job is to preserve the peace, and any number of antisocial acts, or worse, have been committed by those who invoke god's will to justify their activities.

There is the further point about Socrates' attitude to the law: when Socrates was a member of the Council – appointment was by lot – he alone opposed a decision of his 49 fellow *prytaneis* to put ten naval commanders on trial together.[38] Socrates regarded the decision as unjust and contrary to the law, as did the Council when it voted against the proposal. On the other hand, when the Thirty oligarchs ruled Athens (404/3 BCE), Socrates disobeyed their ruling to seize a man from Salamis for execution in Athens. Socrates refused because he thought the command was unjust [32d], *not* because it was contrary to law, given that commands issued by the Thirty were (strictly speaking) lawful. Plato is very keen to demonstrate that Socrates was law-abiding, though keener still to show he confronts injustice, but this is not congruent with acquiescence to the injustice he suffers. It is probable that Plato

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then I deserve to be punished. Good must be repaid with good; evil with evil. In the *Republic*, Plato attributes it to Polemarchus [332d].

[38] *Apology* 32b-c. After a successful sea battle in 406, the ten were accused of failing to retrieve the dead. The fifty *prytaneis* constituted a committee responsible for preparing the Council's agenda.

wanted to portray his paradigm philosopher as someone who draws attention to and challenges injustice, except when he is its victim. In this way Plato could preserve one of Socrates' most important characteristics – confrontation with thoughtless power – while avoiding accusations of self-interest.

Euthyphro

Appropriately, the dramatic preface to discussions during Socrates' last days is the *Euthyphro*, in which Socrates is about to appear in the king archon's stoa to answer an indictment against him. The subject of this dialogue is piety: 'is what is pious loved by the gods because it's pious, or is it pious because it's loved by them? [10a]. In other words, is something pious in and of itself without reference to what the gods think about it? The tentative answer is yes: 'the pious is loved for the very reason that it's pious; it's not pious by reason of being loved' [10e]. The remainder of this dialogue between Socrates and Euthyphro concerns the type of conduct that might attract divine approval, but the discussion goes around in circles and resolves nothing further [15b-d].

The dramatic setting of this work is fundamental to understanding what is going on. Euthyphro is a seer [3e, *mantis*, soothsayer] who is bringing a lawsuit against his own father for killing, probably by neglect, a day-labourer who, in a drunken rage, had murdered one of his father's slaves. Euthyphro notes that most people think he is being impious in proceeding against his father, particularly in a case like this, but Euthyphro dismisses their opinion because he knows what piety and impiety are, whereas they do not. Given that Socrates is being indicted for impiety, he could not have found a more appropriate interlocutor than a seer who possesses overweening confidence about his knowledge of the gods.

Like most Socratic dialogues, the matter under discussion remains unresolved: Euthyphro says he has to attend another appointment, so Socrates is left lamenting a lost opportunity to become an expert in divine matters and therefore not be guilty of impiety. Christopher Rowe is not alone in thinking 'the discussion has come very close to finding out what piety really is – and that it is exemplified in the person, and activities, of Socrates himself'.[39] Rowe has missed the point: Plato is not being evasive; he could have extended the discussion if this had served his purpose. The problem is that Socrates himself is motivated

[39] Christopher Rowe, 'Introduction to *Euthyphro*' in *The Last Day of Socrates* (London: Penguin, 2010) 5.

and guided by a divine voice.[40] His philosophising is an act of piety because he obeys the gods – that is, it is loved by the gods, therefore it must be pious. There is no indication that his philosophising is loved by the gods because it is pious in and of itself. In other words, Plato cannot leave piety as a substantive because that would contradict his portrayal of Socrates. To this end, Plato is keen to show that, despite their different views about piety, Socrates and Euthyphro have a great deal in common – both attend the king archon's stoa, both are grappling with matters of piety, both possess divine knowledge – and Plato is happy to allow the argument to meander before ending inconclusively. The point is that, for Plato's auditors and readers, the unfinished argument continues and is further informed, and framed, by Socrates's trial and death.

Theaetetus and *Euthyphro*

There is an additional point: *Euthyphro*'s association with Socrates' final days has obscured its dramatic placement within Plato's corpus – immediately after the *Theaetetus*. We are accustomed to place *Theaetetus* together with *Parmenides* – there are references to Parmenides in *Theaetetus* 180d and 183d-e – while the dramatic settings of *Sophist* and *Statesman* clearly place them in that order on the day after *Theaetetus*. Indeed, the four works are usually classified together as later works,[41] whereas *Euthyphro* is invariably regarded as an early dialogue. These classifications might be correct, but if Plato wrote *Theaetetus* well after *Euthyphro* then his dramatic setting made sure the later dialogue led straight into the earlier: at the end of *Theaetetus*, Socrates says he has to leave his interlocutors because he must attend at the king archon's stoa to answer the indictment against him [210d]. In short, he walks directly to the beginning of *Euthyphro*.[42] The juxtaposition of the two dialogues is significant. *Theaetetus* is a sustained discussion about the definition of knowledge, but no agreed definition is reached before Socrates' departure. Socrates is then engaged in a discussion about piety, which also ends without resolution, but

[40] *Apology* 31c-d.

[41] For example, Timothy Chappell asserts there are six stages in Plato's philosophical development, and these four works, along with *Philebus*, represent the fifth stage [*Reading Plato's Theaetetus* (Indianapolis: Hackett Publishing, 2005) 10-11] while Gregory Vlastos asserts they are products of Plato's middle (*Parmenides* and *Theaetetus*) and latest (*Sophist* and *Statesman*) periods [*Socrates: ironist and moral philosopher* (Cambridge: Cambridge University Press, 1991) 46-47].

[42] Ruby Blondell, for example, notes the importance of *Theaetetus* being set on the day Socrates faces his indictment, but she does not mention *Euthyphro* [Blondell, 317].

this time it is the interlocutor, not Socrates, who terminates the conversation. Both dialogues conclude in epistemic dead-ends, but in both the journey to that point has clarified matters under discussion.

The chronology and characterisation of both dialogues leave little doubt that Plato wanted *Euthyphro* to be Socrates' last public philosophising. The setting is deliberate: Socrates' final elenchus was about piety, with an 'expert' on the subject, in a sacred area, immediately before (in place and time) his indictment for impiety. When Euthyphro terminates the dialogue, Socrates feels let down because he had not yet learned what piety is. Plato's point is that, in his last public elenchus, Socrates was abandoned by one of the few interlocutors who might have helped him.

Gorgias

Indeed, there are times when dialogue is inadequate or simply fails. Socrates begins this discussion with three interlocutors, but first Gorgias and then Polus withdraw, leaving the combative Callicles to continue. The dialogue fails to flourish. Socrates laments to Callicles that 'you and I are doing an odd thing in our conversation. The whole time we've been discussing, we constantly keep drifting back to the same point, neither of us recognising what the other is saying' [517c]. Socrates' attempt to put the discussion back on track meets with only partial success. He realises he has been reduced to stump oratory [519d], thereby confirming an accusation Callicles had levelled at him earlier in the dialogue [482c].

Plato has presented an ambitious and sophisticated dialogue, but has deliberately undermined both qualities: the discussion degenerates into an edgy impasse. Socrates acknowledges he is under threat of death [521b-d]. He abandons dialogue and concludes by narrating an eschatological myth about the judgement of souls after death. The dialogue is unable to resolve its central issue – Socrates' assertion that it is better to suffer wrong than do wrong – but thereby underscores the roles of myth and narrative in broadening our understanding of contentious matters.

Phaedrus

This is the only Socratic dialogue set in a rural retreat. It is a private conversation between Socrates and Phaedrus, who is going for a walk outside Athens to recuperate after spending an exhausting morning listening to Lysias the orator. Lysias is the son of Cephalus,

whom we met in the *Republic*, and who lives in Piraeus. Plato is setting a scene in which Socrates will again be venturing outside his 'comfort zone' within Athens' walls. Plato even has Socrates agreeing with Phaedrus that 'it's more refreshing to walk along country roads than city streets' [227b], a sentiment completely foreign to the city-loving Socrates. Indeed, when they reach a shady spot on the bank of the Ilisus, Phaedrus notices that Socrates 'appear[s] to be totally out of place' because he 'never even set foot beyond the city walls' [230c-d]. Socrates agrees: he is devoted to learning, but 'landscapes and trees have nothing to teach me; only people in the city can do that' [230d], an avowal he makes immediately after delivering a brief oration of idyllic sentiment on the beauties of their surrounds. Plato is constructing a dramatic framework of lyrical contradiction. The city-dwelling Socrates, about to listen to Phaedrus read a speech that is not his – it is by Lysias – is able to speak with poetic feeling and insight on a subject and in a place which are unfamiliar to him.

The last section of *Phaedrus* contains a well-known criticism of written discourse. The participants in a dialogue are responsive to one another, reinterpreting and reformulating arguments and so on, but if you question a written text about its meaning, it returns the same answer again and again [275d-e]. Moreover, for anybody who has written political discourses, if that person has knowledge of truth, and if he can defend his writings when challenged and thereby show how inferior his writings are compared to his speech, then he deserves to be known as a lover of wisdom rather than merely a writer of political treatises [278c-d]. Plato is engaging in both self-criticism and self-defence. He is aware of writing's limitations, in particular that written discourse cannot distinguish between suitable and unsuitable readers [275e]. He therefore writes dialogues, which are usually open-ended and inconclusive and render a different interpretation with each reading. Further, Plato uses detailed dramatic frameworks and characterisation to 'locate' his dialogues. Ergo, though he cannot control readings or attempts to abstract ideas from their context, the dialogues are tailored to their participant characters (who are usually real people) and express the limitations that often attend spoken dialogue.

This is a masterfully constructed dialogue in which dramatic contradiction is intrinsic to Plato's intent. Socrates and Phaedrus are having a private conversation, but they are out in the open and very far from being 'in private'. Socrates lives and breathes Athenian life, yet is perfectly comfortable in a pastoral retreat. Socrates criticises the unresponsive quality of written documents, yet his philosophy lives only through written dialogues, and *Phaedrus*

itself is a model of multi-layered meaning and fluid interpretation. Socrates neither believes nor disbelieves local legends: rather, he is content to accept what is generally believed, because a broad-scale program to supply rational explanation for these myths would detract from more important pursuits [229c-230a].

Sophist and *Statesman*

Socrates has only a very minor role in both dialogues. The *Sophist* is a discussion between Theaetetus and an unnamed philosopher from Elea in southern Italy, famous as the home of Parmenides and Zeno.[43] Socrates introduces the discussion – about the characteristics of a sophist – and thereafter is silent. The visiting Eleatic is also the primary interlocutor in the *Statesman*, this time with a young namesake of Socrates in a discussion about expert knowledge required by those who rule. Again, Socrates plays no role apart from introducing the discussion.

The setting of both dialogues after the epistemological investigation of *Theaetetus* is significant. *Sophist* concludes by arguing that a sophist mimics the characteristics of justice and virtue, but does not possess knowledge of what he is mimicking. He is not self-deluded; he has suspicions that he doesn't have this knowledge and therefore pretends to possess it. He is an 'insincere imitator', unlike 'sincere imitators' who foolishly and falsely think they possess this knowledge [268a]. If he can maintain his insincerity in public speeches then he is a demagogue, but if he speaks in 'private conversation to force the person talking with him to contradict himself' then he is a sophist [268b-c]. But isn't Socrates famous for arguing people into contradiction? In the *Gorgias*, for example, Callicles (a young politician) berates Socrates for forcing Gorgias (a teacher of rhetoric) to contradict himself, which was 'just the thing you like. … Tell me, Socrates, aren't you ashamed, at your age, of trying to catch people's words and of making hay out of someone's tripping on a phrase?' [482d, 489b]. In *Meno*, the titular character says to Socrates, 'before I even met you I used to hear that all you do is get puzzled yourself and make others puzzled' [80a]. Isn't Socrates, therefore, a sophist? The question, or accusation, is important because it shows how easily, and dangerously, dialogue can be misunderstood. However, Plato made it clear that Socrates' intent was not to confound but rather to test the Delphic oracle's declaration that nobody was

[43] Zeno was Parmenides' protégé and is best known for his paradoxes.

wiser than himself.[44] He found that those who professed to be, or were acclaimed as, wise or knowledgeable about something were nothing of the sort. The oracle was right: Socrates was wiser than anybody he challenged because 'it is likely that neither of us knows anything worthwhile, but he thinks he knows something when he does not, whereas when I do not know, neither do I think I know'.[45] While there is a clear echo of the earlier *Apology* in the later *Sophist*, the differences are no less clear: Socrates did not mimic anybody, because no person possessed the traits he might have thought worth mimicking; Socrates was not merely suspicious that he did not know things – rather, he avowed it – and he never pretended to know; Socrates was not a demagogue – and he did not make long-winded speeches to crowds. Indeed, his sole extended public speech (the *Apology*) resulted in his being condemned to death. Further, Socrates rarely tried to convince people in private conversation; his elenchus was an instrument of public participation. Moreover, if Socrates were, like a sophist, to be evaluated according to the success of his methods, he would be assessed as outstandingly unsuccessful. The elenctic dialogues usually end inconclusively or in Socrates' failure to change anybody's mind,[46] yet he still managed to upset a lot of people. It is Plato's sober warning that public debate rarely achieves what we hope to accomplish.

In the *Statesman*, Plato has the Eleatic visitor compare three political systems: rule by one person – monarchy or tyranny; rule by a few – aristocracy or oligarchy; and rule by many – democracy. The best system is monarchy, when one person rules according to law, but the worst is tyranny, when one person rules unfettered by law. The second-best system is rule by an aristocratic few in compliance with the law, and the second-worst is rule by oligarchs who disregard it. Democracy, then, is the worst system when the state is law-abiding, but is better than the others when the law is disregarded. Whether worst or best, democracy has no other

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[44] *Apology* 20e-21d.

[45] *Apology* 21d.

[46] The conclusion to *Lesser Hippias* is instructive. Hippias, a famous sophist, is arguing against Socrates' view that the good person does injustice voluntarily, while the bad person does it involuntarily.

> Hippias: I can't agree with you in that, Socrates.
>
> Socrates: Nor I with myself, Hippias. … On these matters I waver back and forth. [376b-c]

This is a striking example of Socratic honesty. Though Socrates' argument to this point succeeded in a limited sense, it failed more broadly, as he realised. Ergo, he disavowed the conclusion of his own argument. The whole dialogue leaves us (and doubtless Socrates and Hippias) uncomfortably aware that winning an argument might count for little.

name [291e - 292a]. As Plato sees it, the broader problem is that so few – hardly more than one or two people – possess expert knowledge of governing. Ergo, a large group is incapable of acquiring this or any other sort of expertise [297b, 300e]. Democracy is therefore largely impotent, the least effective for doing either good or evil compared to the other two systems [303a]. Then Plato draws a conclusion that is disarmingly modern: except for the few who possess expert knowledge, those who govern under any system are not statesmen but rather experts in party faction, 'leaders of bogus governments and themselves no less bogus, they are supreme imitators and sorcerers, the sophists' sophists' [303c].

Plato's dramatic silence

It is significant that Plato does not speak in any of his dialogues. Indeed, his sole appearance is in the *Apology* [38b] as one of four people who would act as guarantors if Socrates were let off with a fine. Plato mentions himself in *Phaedo*, the narrative of Socrates' death-bed conversation, but only to record his absence – 'Plato, I think, was ill' [59b] – even though Phaedo names 14 others who were present. Phaedo narrates this dialogue to Echecrates, a well-known Pythagorean, in Phlius, a Pythagorean refuge about half-way between Athens and Sparta. Why is the narrative setting of this superb and important dialogue – Socrates' philosophical testament – so far from Athens, in a city that supports Sparta, and why is its recipient a Pythagorean rather than a recognised disciple of Socrates? The probable answer is that Plato wanted to demonstrate that, though Socrates almost always conducted his discussions in Athens, and though the city silenced him, his philosophy was still alive and was being embraced by people who lived well beyond Athens and whose political allegiance was not Athenian, who were not part of Socrates' circle and who were not even Socratic philosophers. Plato's Socratic dialogues demonstrated that the 'gadfly' [*Apology* 30e] could not be silenced and was still pestering Athens, asking its citizens awkward questions; *Phaedo* showed that the gadfly had flown well beyond Athenian walls.

Plato's dramatic reticence is a manoeuvre to keep his dialogues at arm's length from himself. No ideas or arguments are presented as his own. There is no identifiable authoritative voice or doctrine of the 'master' to which readers/listeners must adhere, or which

must be taken on trust, or which is beyond criticism.[47] It is interesting to note Karl Popper's well-known view that Socrates 'refused to compromise his personal integrity', whereas Plato 'was led along a path on which he compromised his integrity with every step he took. He was forced to combat free thought, and the pursuit of truth.'[48] The obvious problem with this view is that Popper's Socrates is no less Plato's creation than those works which, as Popper argues, defend certain aspects of tyranny. Socrates is eternally present in Plato's dialogues, and Plato allowed his Socratic dialogues to circulate, and be used in the Academy, alongside (presumably) later works such as the *Republic*.[49] If Plato were the person depicted by Popper then he would have repudiated his earlier dialogues or suppressed them: he did neither. More likely, Plato would have abandoned dialogue – he never did – to write treatises instead. As Ruby Blondell rightly notes, a dialogue '*forces* human plurality and difference on our attention' because it involves two or more characters. We are confronted with people who are in some sort of relationship, and if we are to understand them we must attend to their intellectual and psychological differences, and to the 'discrete physicality in which these differences are grounded'.[50]

Laws

Ergo, even in the *Laws*, probably Plato's last work, and in which Socrates does not even appear, the three participants – Cleinias of Crete, Megillus from Sparta, and an unnamed Athenian – and their dramatic setting on Crete are presented in some detail. The Athenian remains anonymous probably because Plato did not want this character's views associated with himself, the Academy, or any known citizen or party. The three begin their discussion

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[47] Plato's reticence is exactly congruent with Nietzsche's description of an educator: 'An educator never says what he himself thinks, but always only what he thinks of a thing in relation to the requirements of those he educates' [*Will to Power*, #980].

[48] K. R. Popper, *The Open Society and Its Enemies*, vol. 1: The Spell of Plato, 4th ed. (London: Routledge & Kegan Paul, 1962) 200.

[49] The dialogues are usually divided into early, middle and late periods, largely on the supposition that Socrates' influence on Plato declined over time. This might be true, but the reasoning can degenerate into circularity. Debra Nails argues, rightly in my view, that the dialogues' chronological order is used to establish facts about the historical Socrates, but views based on those facts are then used to establish the chronology [*Agora, Academy, and the Conduct of Philosophy* (Dordrecht: Kluwer Academic, 1995) 70-71].

[50] Blondell, 49 [author's emphasis].

as they embark on walking the considerable distance from Knossos to the shrine of Zeus on Mt Ida – that is, from the legendary home of Minos to the birthplace of Zeus. In the opening exchange, Cleinias and Megillus state that the law codes of their respective cities have divine origins. The Athenian reminds them that, every nine years, Minos consulted with his father, Zeus, and formulated laws for their cities according to the god's pronouncements [624]. The dramatic setting is clear: the interlocutors are on a pilgrimage, discussing a hypothetical society governed by laws directing all aspects of life, and their destination is the shrine of a divine lawgiver. The dialogue ends without their having completed the pilgrimage, an appropriately unfinished and open-ended frame to their discussion.

Summary

We are accustomed to think of Plato as Raphael portrayed him in the Vatican's *School of Athens* fresco: Plato, pointing heavenwards, stands next to Aristotle, who is gesturing towards the ground. This visual metaphor is not wrong, but it diverts our attention from the dramatic settings and characterisations through which Plato grounds his dialogues in everyday life. Plato's dialogues are thoroughly immersed in the social and personal exigencies familiar to his readers/auditors. Dialogue can clarify matters beyond the capacity of individual participants, but it is also unpredictable, demanding, and sometimes threatening. Plato's message is clear: philosophy appeals to eternal verities, but its practice is inextricable from the disappointments and dislocation, and occasional enlightenment and consolidation, of ordinary life.

This study has uncovered two novel points. The first is that Plato deliberately avoided setting his dialogues in the agora. The sole (and partial) exception – *Euthryphro* – is also a condemnation of the agora. Second, the dialogues clearly exhibit a public/private dichotomy: those set in private are treated very differently from those set in public. There is a dramatic tension here: Plato withdraws from the agora, but leaves no doubt that philosophy is a public activity. This tension characterises some of the dynamics of dialogue that emerged from this study.

Excursus 1 – Stuart Hampshire's appeal to the *Republic*

The following is a good example of what happens when insufficient attention is paid to a dialogue's dramatic setting. In chapter 9 we noted Hampshire's argument that each of us tries to balance pros and cons, and resolve contrary pulls and impulses, in our own minds, and that

this inner process of hearing all sides of an issue is analogous to the resolution of political conflicts.[51] Hampshire quotes a well-known episode from the *Republic* to support his contention:

> Leontius, the son of Aglaeon, was going up from the Piraeus along the outside of the North Wall when he saw some corpses with the public executioner nearby. He had an appetitive desire to look at them, but at the same time he was disgusted and turned himself away. For a while he struggled and put his hand over his eyes, but finally, mastered by his appetite, he opened his eyes wide and rushed toward the corpses, saying, 'Look for yourselves, you evil wretches; take your fill of the beautiful sight'. [439e-440a]

This seems to be a parable about conflict in the mind of an individual. Leontius is angry with himself because his desires have compelled him to act contrary to his reason. And just as there are different and often conflicting parts of the mind – appetitive, rational and emotional – so there are the corresponding divisions in the polity. Concord is achieved when the rational part rules over the others. Hampshire agrees with Plato about the analogy between individual and polity, but disagrees about being able to achieve harmony in either because there will always be disputes in both.

One significant problem with Hampshire's argument concerns his interpretation of the parable itself. For example, Leontius was known for being attracted to youths with corpse-like complexions.[52] His desire to look at the bodies was probably sexual rather than a morbid fascination with death. Both desires are appetitive, but the former is more instructive in this context. Leontius was to the north of two parallel walls – the Long Walls – that formed a defensible corridor connecting Piraeus to Athens. South of the parallel walls was the third Long Wall; it connected Athens to its other port of Phaleron. Importantly, the walls were

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[51] Hampshire, *Justice*, 40-42.

[52] Debra Nails, *The People of Plato: a Prosopography of Plato and other Socratics* (Indianapolis: Hackett, 2002) 186. Ruby Blondell notes that Leontius 'stands out for his peculiar interest in corpses', thereby missing the significance of Leontius' sexual proclivity in Plato's portrait of a man who is fundamentally unlike Soctrates [Blondell, 62].

associated with defending Athenian democracy.[53] If Leontius had been on the southern side of the parallel walls he would have been inside the area formally controlled and protected by Athens. By choosing to travel outside the northern wall, Leontius was literally and metaphorically outside the city, and he was using the path that, in times of conflict, was less safe. Further, this route took him past the ravine into which the bodies of criminals were throw after their execution. There is clearly a lot going on in this brief passage.

In a work that is largely about an ideal city, Plato intentionally located this parable outside the *polis*. Further, the *Republic* opens with Socrates, accompanied by Glaucon (Plato's older brother), also walking from Piraeus to Athens. Leontius' situation therefore echoes that of Socrates, which sharpens the contrast between them. Leontius exercises rational calculation to put himself in a place that would titillate his appetites. The character of Glaucon, well known for his love of boys – Plato teases his brother about it [474d-e] – is a reminder that Socrates was also attracted to youths,[54] but his appetitive element, unlike that of Leontius, was controlled by his rational element. According to Socrates, this parable 'suggests that anger sometimes makes war against the appetites', so if a person's desires compel him to act against his reason (as with Leontuis) he becomes angry at himself [440a-b]. Socrates further notes that, while a person's spirited element (*thumos*)[55] might ally itself with reason, it is most unlikely to ally itself with the appetites to do something that reason decided should not be done [440b-e]. Clearly this parable is not a straightforward story about inner conflict. Rather, it is an assertion that, in a battle between a person's rationality and her or his desires, the person's 'passionate sense of self' will take the side of the former, not the latter. Leontius succumbed to his desires, so what happened to his *thumos*? This is where the parable's locatedness becomes a vital factor in its interpretation. The three elements that exist in a person – appetites, reason and spirited element – are analogous to the three classes that make up the ideal *polis*, and both individual and city will be just and work best if each is ruled by the rational part. Leontius is outside the city – he is, as it were, beyond the Athenian

[53] As evident from Thucydides 1.107 and Xenophon, *Hellenica* 2.3.11. In 404 BCE, the Thirty Tyrants assumed power immediately after demolition of the walls.

[54] See, for example, *Charmides* 155c-d.

[55] In this section, Robin Waterfield translates *thumos* as 'passion', while F. M. Cornford and Desmond Lee render it as 'indignation', probably because it can be in conflict with one's desires. In this context, 'sense of self' or 'life force' might be more helpful translations.

'pale' – and his rationally calculating element does not rule his appetites but rather facilitates their indulgence. He is Plato's cautionary vignette of what happens to people when they intentionally stray outside the *polis*, outside the civilised realm in which contrary ideas can adequately be heard and weighed, and into regions where appetites reign.

Of course, Leontius does have inner conflict and disharmony, and to that modest degree he illustrates Hampshire's argument, but this complex parable offers little support for Hampshire's thesis.

Excursus 2 – The importance of opening words

Timaeus

Those who think that the first words of Plato's dialogues are not as significant as I have asserted should ponder the opening words of *Timaeus*:

Socrates: One, two, three … where's number four, Timaeus?

Socrates is referring to the number of guests who are supposed to be present, but for a dialogue containing passages of sophisticated mathematics and geometry this is a particularly apposite beginning.[56] Moreover, Timaeus is portrayed as coming from an area of southern Italy known for Pythagorean philosophy. The number four was sacred to Pythagoreans because it was the 'power' of the tetractys of the decad, upon which they swore binding oaths.[57] In one line, therefore, Plato, has anticipated the mathematical and metaphysical content of what is to come.

[56] I wrote this before discovering that M. R. Wright had also noted these 'deceptively simple' opening words [*Introducing Greek Philosophy* (Berkeley: University of California Press, 2010) 218]. Wright did not, however, notice the allusion to Pythagorean philosophy.

[57] The tetractys comprised 10 points arranged to form an equilateral triangle. Each side has 4 points. Counting from the apex, the triangle has 1 + 2 + 3 + 4 = 10 points. For Pythagoreans, 10 is the 'nature' of number, and 4 is the 'power' of 10. See G. S. Kirk and J. E. Raven, *The Presocratic Philosophers* (Cambridge: Cambridge University Press, 1957) 230.

Menexenus

We have already noted (footnote 13 above) that the first words of both Socrates and Menexenus are '*ex agoras*' ('from out of the agora'). In this dialogue, Socrates recites to Menexenus a funeral oration he heard declaimed by Aspasia. She taught oratory to Socrates and had been *de facto* wife of Pericles.[58] Just before Socrates begins he notes that he and Menexenus are alone [236d]. Plato's dramatic setting is clear: Socrates is reciting a speech he did not compose and which has nothing to do with the agora, and he is declaiming to an audience of one rather than a commemorative assembly.

This speech is good example of the genre, but it is also a satire on standard patriotic versions of history. For example, Socrates states that Athens was 'now governed by the best men', and that those who exercised power and held public offices were 'thought wise and good' [238c-e], views held by neither Socrates nor Plato. However, this is not merely satire disguised as encomium. It is also a paradigm of rhetorical method. Ergo, the satire is far from unremitting; rather, it is calculated, restrained and – interspersed among passages of genuine commemorative ardour – effective.

Indeed, the dramatic setting and subtleties of this dialogue were soon lost on Plato's successors. Shortly after his death, it seems one of Plato's students decided that Socrates' speech needed additional material to compensate for its perceived shortcomings. He added an interpolation [244b-246a], but the inserted passage is anachronistic, has the wrong narrative direction, and lacks the sophisticated satire of the original work. The interpolator failed to note Plato's dramatic directions: Socrates' speech was not for public recital and should not be read as if it were.

Excursus 3 – Plato's environmental observations

In the *Critias*, Plato notes that ancient (mythical) Attica used to be fertile and forested, but in Plato's day it was 'like the skeleton revealed by a wasting disease' because 'the rich topsoil has been eroded and only the thin body of the land remains' [111b-c]. Whereas rainfall now runs off the hard ground and into the sea, it used to be absorbed by the deep soil and thereby distributed 'to feed springs and rivers throughout every region of the country'. Proof of this could be seen in surviving monuments at long-dry sacred springs [111d]. Plato's

[58] Indeed, Socrates thinks she composed the famous funeral oration delivered by Pericles in 430 [236b].

is a striking and perceptive observation. He even knows that a top layer of clay soil acts like a reservoir to store the water beneath it. Like most readers, Donald Hughes regards this passage as evidence that Plato understood the importance of forests and the harmful effects of deforestation.[59] Hughes might be right, but Plato does not blame deforestation (or, for that matter, overgrazing) for Attica's soil erosion. Rather, he attributes it to great floods that occurred sporadically over the preceding nine millennia.

The context is Critias' retelling of a story about ancient Greece that Solon learned from priests when he visited Egypt.[60] Plato's auditors would have been familiar with Solon's poetic works. Though only fragments have survived, Solon's views on human responsibility are evident and were well known. He denied that Athens would be destroyed by the gods – 'Our city will never be destroyed by a dispensation from Zeus or the plans of the blessed immortal gods'; rather, 'the ruin of the city comes from unjust men'.[61] However, overriding all is *moira* (fate), who 'brings good and evil to mortals'. No-one knows how her or his plans and actions will turn out – Solon's affirmation of the view that human knowledge and action is subject to arbitrariness and uncertainty – yet by our own actions we may suffer calamity. There is a contradiction here: humans are responsible for a city's demise, yet fate governs all. This contradiction is reflected in Plato's observations. In Solon's account, Attica's soil used to support dense forests, of which remnants still survived in Plato's day, 'but not long ago' [111c] mountains which now support only apiary grew large trees from which rafters were cut for use in huge buildings.[62] Moreover, these rafters were still intact. In other words, Plato observed recent deforestation caused by demand for lumber, yet still attributed Attica's loss of forest cover to primeval flooding. Solon's etiological myth was more compelling than Plato's own observations.

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[59] J. Donald Hughes, *Ecology in Ancient Civilizations* (Albuquerque: University of New Mexico Press, 1975) 70-71.

[60] Critias' account begins in *Timaeus* [20d-27b] and is resumed in *Critias*. According to Plato, Solon (c. 640-560) was revered as the wisest of the seven sages [*Timaeus* 20d-e].

[61] Fragments 4 and 9. The fragments are translated by John Lewis in *Solon the Thinker* (London: Duckworth, 2006) 155-162.

[62] It is noteworthy that there is a lacuna in the text immediately after these words. Diskin Clay inserts 'lofty trees grew there' – a reasonable guess for the missing words. It might be that a transcriber was confused by the contradiction between a landscape almost denuded by primeval erosion and deforestation caused by recent demand for roof beams, and so skipped over this passage, forgetting to return to it.

This passage from *Critias* is usually regarded as the most graphic description of environmental destruction in classical literature. Perhaps it is, but it is also a statement that we inherit an environment we did not make and tend to exacerbate problems we inherit. It might be better read as an expression of despair over, or acceptance of, our limited ability to ameliorate the environment in which we live.

Conclusion

Plato's dramatic artistry, particularly the interplay of settings and characters, is inseparable from his philosophy. This entails that dialogue itself is as integral to our intellectual inheritance as more familiar Platonic doctrines such as the Forms – the contrast between invariant generalities and individual manifestations of things. Indeed, dialogue could be considered more integral: whereas Plato often challenged what we regard as his fundamental ideas, he never abandoned dialogue.

The following chapter draws on the above to articulate a list of dialogic characteristics that may help to put us back in touch with a neglected part of our intellectual heritage: we will disagree about things, but we will never understand why we are disagreeing, or even what we are disagreeing about, unless we clarify those matters in dialogue with each other.

At the heart of ecological ethics, therefore, is the principle of *audi alteram partem*, always listen to the other side.[1]

Chapter 11
The Dynamics of Dialogue

Overview

Chapter 10's detailed study of Plato's dramatic settings showed how he used dialogue to effect his philosophical objective. Our approach to and insights gained from that study were, in large part, a response to modern dialogic failure regarding climate change. This chapter fuses ancient and modern hermeneutic horizons to develop a list of dialogic characteristics. These characteristics comprise a living heritage of dialogue. They show us what dialogue is really like, challenging taken-for-granted assumptions and encouraging our participation in dialogue on matters we might otherwise think have moved beyond discussion. To this end it is worth keeping in mind two salient points among several to have emerged from our study: Socrates never stopped engaging in dialogue, and Plato never stopped presenting philosophy as dialogue.

Dialogue – warts and all

(1) Genuine dialogue is conducted in public, but this does not entail that all public dialogic space is equivalent. The agora is Athens' paradigmatic public area, but Plato refused to set any dialogue (*Euthyphro* is a partial exception) within it. The location of a dialogue, in terms of historical and cultural memory, will fundamentally influence, and cannot be segregated from, the content of that dialogue.

(2) By setting dialogue in public, Plato ensures that the auditor/reader becomes an observer or participant in the discussion. Our opinion is invited or even required.

(3) Public dialogue is more difficult to control than private discussion. Plato was acutely aware that the latter can be held at arm's length, whereas the public domain is open to

[1] James Tully, *Public Philosophy in a New Key*, vol. II (Cambridge: Cambridge University Press, 2008) 85. Tully regards dialogue as the best way to break down 'broad oppositions' between, for example, development versus environment.

influences and factors that might be unanticipated and unwelcome. Private dialogue may favour one party over another, not because it wins the argument but because it avoids the truth. On the other hand, defences may be lowered in private, which might facilitate candour and compromise.

(4) In every dialogue set indoors (except the *Republic*) Plato is careful to keep the discussion at arm's length from the reader. We as an audience are not participants, and have no role, in these dialogues. We are observers, but only in the sense of privately 'listening in' rather than publicly 'listening to' what is going on. In the *Republic* we are being addressed directly, but the dialogue ends with Socrates narrating a myth about post-mortem justice, confirming that some matters cannot be resolved or demonstrated through dialogue.

(5) Dialogue is never truly discrete. It is usually framed by circumstances, particularly threats, which participants have unwillingly and/or unwittingly inherited and which will influence a dialogue's direction.

(6) Dialogue is a living thing. Prognostications about its course are rarely accurate because its progression is upset and confused by unexpected responses to argument and counter-argument, personality clashes and so on.

(7) Dialogue never really ends. Rather, it ceases at a certain moment that might be satisfactory or unsatisfactory, or concessional, to one or both parties. Plato's open-ended dialogues assume the conversation has not finished and invite the reader to continue. Even if one party concedes, dialogue challenges the idea that a matter is resolved and there is nothing more to say.

(8) By the same token, dialogue has to be sustained. Some tactics, such as arguing or scaring an interlocutor into silence, can paralyse discussion. In the *Gorgias*, for example, one of Socrates' interlocutors (Polus) was 'bound and gagged' and 'too ashamed to say what he thought' [482d-e] after being compelled to admit one of Socrates' points. Polus contributes nothing further to the dialogue. The possibility of dialogue evaporates if participants feel they have no agency in the matter under discussion.

(9) Dialogue is not about winning an argument. The party that comes off worse in the opinion of spectators might be the one that has done most to facilitate the dialogue and produce a result.

(10) What we expect from a dialogue and what we receive from it are often very different. It is quite possible for a failed dialogue to clarify matters, but we might not realise that until afterwards. Dialogue might founder on disagreement, but be productive nonetheless.

(11) Participants might more or less agree on a matter, but the dialogue's framework and parameters may shift such that the hard-won agreement becomes less important or even superfluous.

(12) The outcome of a dialogue can change the meaning of an earlier one. An unsuccessful dialogue, for instance, might throw a different or even suspicious light on a successful dialogue that preceded it. The hermeneutic trajectory of the older dialogue can be fundamentally altered by the more recent. For example, current dialogue about responses to Covid-19 has profoundly changed the way we view arguments from the 1980s and 1990s about the roles of government.

(13) Not even Socrates can prevent some dialogues from failing, but Plato never abandons dialogue as his prime method of conducting philosophy.

(14) Socrates is critical, occasionally acerbic and sometimes mischievous, but never condescending.

(15) Participants should be dealt with in good faith, even when we know or suspect they are scoundrels. Recognising who we are dealing with is not the same as agreeing to descend to their level.

(16) We prefer to think that good ideas win arguments, and that dialogue should reach a conclusion based on the merits of matters under discussion. However, the character and personality of participants are often more important that the argument. Dialogue on matters

which appear straightforward and amenable to resolution can be derailed by inappropriate or uncongenial participants.

(17) The subject of a dialogue might appear to demand resolution by appealing to higher principles or rational argument, but this does not mean the matter won't be decided by venality.[2]

(18) Dialogue is premised on the view that rationality has a higher claim on us than social compulsion. Appeals to social rank and dignity, or to financial and political power, are (or should be) dialogically irrelevant: interlocutors of vastly disparate rank or power are equals in dialogue. However, this does not entail that the more powerful side will honour a rational result.

(19) No women appear as interlocutors in any of Plato's dialogues, yet the characteristics of genuine dialogue are more female than male. As Carol Gilligan notes, women tend to construct moral problems in terms of care and responsibility; men in terms of rights and rules.[3] For women, a moral imperative is an injunction to discern and alleviate a real and recognizable problem; for men, it is an injunction to respect and protect the rights of others. Ergo, men initially regard an obligation to others in terms of non-interference – negatively rather than actively.[4] Male assumptions about non-interference and protection of rights may hinder dialogue that aims to address a specific problem.

(20) Dialogue helps to overturn false binaries – for example, the assertion that we must choose between the economy or the environment – because it is open to points of view that challenge, or are not constrained by, those binaries.

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[2] For example, some delegates voted in favour of the 1948 UN resolution for the partition of Palestine, not because they carefully weighed competing arguments but because their countries were threatened with withdrawal of US economic assistance if they voted against the proposal [William L. Cleveland, *A History of the Modern Middle East*, 3rd ed. (Boulder, CO: Westview Press, 2004) 264].

[3] Carol Gilligan, *In a Different Voice* (Cambridge, MA: Harvard University Press, 1982) 73.

[4] Ibid., 100.

(21) It is important to recognise when dialogue is going nowhere. At that point it might be more productive to try a different strategy, such as narrative, or perhaps terminate the discussion.

(22) In almost any dialogue, the other side is very unlikely to see or assess the matter at hand as we do. Further, things we see as unrelated or irrelevant may be seen in a very different light by our interlocutors. A third-party observer may have difficulty in identifying what each side is arguing about, or even whether they are arguing about the same thing.[5]

(23) Intent and motive are often misunderstood. All participants are usually assumed to be self-interested, but this might not be true. Moreover, one party's idea of self-interest might be very different from another's. For example, if two people are working to address climate change, is the one with children more self-interested than the one without children? If neither person is working to address climate change, are they equally or differently self-interested? In both examples, assumptions of self-interest may be misleading.

(24) Genuine dialogue is a compromise, and without compromise there is no dialogue. The mere fact you are responding to, and engaging with, the other party entails that you are probably compromising your original dialogic strategy.

(25) Genuine dialogue requires genuine listening to the other party. In a standard elenchus, Socrates' interlocutor expresses a personal belief (p), and then Socrates educes further beliefs (q and r) from that person which, taken together, entail a refutation of p.[6] This technique demands apt responses based on close listening. The aim, albeit difficult to achieve, is for interlocutors to be rationally convinced rather than browbeaten into submission or overawed by rhetoric.

[5] As Socrates observed, in many discussions 'it's not easy for the participants to define jointly what they're undertaking to discuss' [*Gorgias* 457c].

[6] So Vlastos, 266.

(26) It follows that genuine dialogue can overcome interlocutors' defences. The give and take of Socratic method can outwit dialogic ego fragility and circumvent or even dissolve a standard adversarial encounter.[7]

(27) There are certain ideas, interpretations and views that interlocutors should simply accept as adiaphora rather than question or attempt to refute. If dialogue is to work, then participants must share at least some values, and agree on some facts, and be prepared to disregard some differences.

The limitations of dialogue

For Plato, dialectic – the process of rational apprehension through question and answer – is the capstone of education. No other subject is more important in the training of rulers.[8] As Aristotle noted, however, its limitation is that we don't push our inquiries into a problem as far as we should because we are more inclined to direct our investigations 'not to the matter itself, but to the views of our opponents'.[9] Ergo, while the result of a dialogue might be a better understanding of a matter than any single party brought to the discussion, it is equally likely that our attempts to anticipate responses to an interlocutor might constrain a bolder investigation into that matter.[10]

Further, there are situations where dialogue is or becomes inadequate or futile, when interlocutors must be silent and listen to fresh, different and cogent narratives about ourselves and our environments. In short, interlocutors must deliberately engage with their emotional brain. It is significant, then, that an important factor in our failure to address global heating is failure of imagination. As Amitav Ghosh laments, the stories we tell ourselves, with their emphases on the journey of individuals, are incompatible with the dramas of climate

[7] As M. W. Rowe argues in 'Wittgenstein, Plato, and the Historical Socrates', *Philosophy* 82 (319) (2007) 63.

[8] *Republic* 535d-e. Dialectic includes the Socratic elenchus, but in the *Republic* dialectic has developed to embrace the method of rational argument by which philosopher-rulers gain understanding into the essential nature of things, and thereby into 'the good' itself.

[9] Aristotle, *On the Heavens* 294b5-15.

[10] Little wonder, then, that Aristotle wrote treatises in addition to dialogues.

change.[11] In the *Timaeus* and *Critias*, Socrates encouraged his interlocutors to tell stories that fundamentally challenged the narrative identity of Athens. The narratives we take for granted – probably because they have proved convenient and biddable – are mostly ineffective in the face of climate change. Through dialogue we may achieve a better understanding of what we must do, but that understanding must also be emotionally compelling.

A modern horizon: David Bohm's *On Dialogue*

In fusing ancient and modern hermeneutic horizons, the former is shaped largely by Plato's dialogues, while the latter is shaped by our own experiences and knowledge of dialogue, but the process can be facilitated by a work that both informs and encapsulates our modern horizon. I have selected David Bohm's *On Dialogue* because it is a keenly observed attempt to understand 'the general feeling that communication is breaking down everywhere' – both between countries and within them.[12] For Bohm, dialogue should possess the following characteristics:

1 – *In* common rather than *making* common

Genuine dialogue is not about having an idea and trying to convince other interlocutors to adopt it, thereby *making* it common to all. Rather, it is about disparate parties talking together to create a new idea which they thereby have *in* common.[13]

2 – It's not about winning

Dialogue is not about point-scoring or trying to impose your ideas on everybody else. No party should be endeavouring to win or defend an opinion. Dialogue is *with* interlocutors, not *against* them.[14]

[11] Ghosh is an Indian novelist. His views were reported by David Wallace-Wells in 'The Uninhabitable Earth', *New York Magazine* (9 July 2017).

[12] David Bohm, *On Dialogue* (London: Routledge Classics, 2004) 1. Bohm was a leading figure in post-WWII quantum physics. It is noteworthy that Bohm does not mention Plato in this work.

[13] Ibid., 3.

[14] Ibid., 7.

3 – All sides should be heard

Each party should be afforded the dialogic space it needs to participate.[15] This is not a rule so much as recognition that dialogue should be inclusive if parties are to feel they are participants rather than spectators. This characteristic echoes Stuart Hampshire's concept of procedural justice.

4 – Meaning rather than truth

If I am convinced I have the truth, and you are convinced you have it, but those truths don't agree, then we might not be able to talk. Instead, dialogue should be less concerned with truth and more concerned with meaning, because if our meaning is incoherent then we will never arrive at truth.[16] For example, if I believe we should adapt to climate change rather than reduce emissions, what do I really mean? It might be that my underlying meaning – 'I want to preserve jobs' – is shared by others and that together we can arrive at more-creative ideas about employment in a low- or no-emissions economy.

5 – Dialogue, *not* negotiation

Negotiation implies a position from which to negotiate an agreement. If each party regards its position as necessary, often in the form of an immoveable point beyond which negotiation is impossible, then dialogue becomes unworkable. Dialogue can only proceed if parties are prepared to ask and answer the question, 'Is this point absolutely necessary?'.[17] They can then explore fresh concepts of necessity. In 1992 when President Bush stated the 'American way of life is not negotiable', he was, in effect, saying there is no point in dialogue unless other countries accede to America's position, which itself would render dialogue impossible.

6 – Dialogue is a threat to leaders

Dialogue is a threat to the view that only leaders can get things done.[18] Dialogue works best when leadership is subordinated to participation. The problem with this characteristic is

[15] Ibid., 35.

[16] Ibid., 43.

[17] Ibid., 25-26.

[18] Ibid., 17.

straightforward: modern political leadership is about imposition, not participation, so genuine dialogue is usually anathema to leaders.

Parallels with Plato

Bohm's points have clear parallels in Plato's dialogues. With reference to points 1 and 2, for example, Socrates did not try to win arguments or impose his view on interlocutors. Instead, participants in a dialogue should try to learn from and teach each other [*Gorgias* 457c]. Indeed, Socrates is anxious that he should not be thought of as eager to win against an interlocutor rather than endeavouring to elucidate the subject [457e].

Point 3 is particularly apposite. Plato is usually keen to hear all sides, and to that end seems occasionally to use more characters than are warranted by the dialogue; *Protagoras* is a good example. However, this impression of over-characterisation is wrong. Plato is aware that most issues cannot be decided by a straightforward argument for or against a matter. Other voices are important to remind interlocutors that each side of an apparently adversarial argument is informed by other views that are not amenable to a neat binary opposition.

At first glance, point 4 is different: Socrates is clearly invested in truth. He states he 'would gladly be refuted if anything I say is not true, and would gladly refute another who says what is not true' [*Gorgias* 458a]. In other words, he would rather lose an argument than win it if truth were on the other side.[19] The difference between Bohm and Plato, however, is slight. Both embrace the pursuit of truth, but both realise that dialogue is unlikely to reach it. Both are wary of interlocutors who claim to possess truth. In Plato's dialogues, this claim to truth, to certainty about something, is usually challenged by Socrates. For example, in the *Republic* Socrates questions Thrasymachus' blustering certainty to know what justice is – 'nothing other than what is advantageous for the stronger' [338b]. Socrates' immediate response is to seek clarification of meaning: 'You say that what is advantageous for the stronger is just, but what on earth do you mean by that, Thrasymachus?' [338c]. By the end of this exchange we are no closer to a definition, but Socrates has clarified a few ideas about justice.[20]

[19] As Gregory Vlastos points out [Vlastos, 43].

[20] The word translated as 'justice' is *dikaios*. It can also mean 'right'.

Point 5 is an extrapolation of 4: a position from which to negotiate is tantamount to claiming a position of certainty. A condition of dialogue is the requirement to allow one's certainties and presuppositions to be questioned. For all his bullying and condescension, even Thrasymachus endures an elenchus: he hurls himself into the dialogue [336b], but the price of participation is Socratic cross-examination.

Point 6 has probably the closest parallel: dialogue is inherently difficult to control, and most leaders are loath to cede control over anything to others. After all, you aspire to leadership in order to take control, so relinquishing it seems to undermine your aspiration. Further, and congruent with point 4, dialogue may threaten the taken-for-granted meanings with which a leader prosecutes her or his agenda. For example, Socrates' quest in the *Laches* for a definition of 'courage' (*andreia* – literally 'manliness'; it could also embrace qualities such as virtue and fortitude) would have been widely perceived as questioning an attribute that was regarded as essential for leadership. Socrates is aware that some of those whom he questioned hated him, as did many who witnessed his cross-examinations.[21]

Conclusion

Dialogue is a foundation of our intellectual tradition. It can be constructive, but also destabilising; mutually beneficial and illuminating, but also confronting and divisive. To succeed, it requires humility and generosity. In an era of tribal politics wherein those qualities are conspicuously absent, what sort of forum might facilitate genuine and productive dialogue?

Excursus – Jürgen Habermas on dialogue

No contemporary philosopher has examined dialogue more exhaustively than Jürgen Habermas. It would be unsurprising, then, if some of the above characteristics of dialogue appeared to have parallels with Habermas's theory about the ideal-speech situation – the conditions under which rational consensus might be achieved. For the most part, however, Habermas's ideas are fundamentally different from those I have enunciated. The following are a few among numerous points of difference.

[21] *Apology* 21d.

(1) In general, Habermas's ideas about dialogue are *pre*scriptive, whereas the above are largely *de*scriptive. Habermas prescribes certain conditions under which rational consensus can occur, whereas Plato is demonstrating and accepting what dialogue is like – good or nasty, productive or inconclusive, conducted with integrity or deception, and so on.

(2) In *The Theory of Communicative Action*, Habermas states:

> It belongs to the communicative intent of the speaker (a) that he perform a speech act that is *right* in respect to the given normative context, so that between him and the hearer an intersubjective relation will come about which is recognised as legitimate; (b) that he make a *true* statement (or *correct* existential presuppositions) so that the hearer will accept and share the knowledge of the speaker; and (c) that he express *truthfully* his beliefs, intentions, feelings, desires, and the like, so that the hearer will give credence to what is said.[22]

In other words, the speaker is not suggesting something that transgresses social norms, is not being deceptive, and is being serious. The problem is that this relegates a range of speech-acts – such as jokes, stories and role-playing – to secondary uses of language.[23] If this were the case then brilliant dialogues such as the *Symposium* would fall well short of Habermas's ideal standard. As Agnes Heller noted, Habermas has 'a deep suspicion of *poiesis* [making, creating; whence 'poesy'] of all kinds'.[24] For example, Habermas would not have agreed with Wittgenstein's idea that it would be possible to write a serious philosophical work consisting only of jokes,[25] whereas Plato often used humour to direct or alter the course of a dialogue.[26]

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[22] Jürgen Habermas, *The Theory of Communicative Action*, vol. 1, Thomas McCarthy trans. (Boston: Beacon Press, 1984 – originally published 1981) 307-308. [*Italics* in original]

[23] As Ross Poole notes in *Morality and Modernity* (London: Routledge, 1991) 82.

[24] Agnes Heller, *General Ethics* (Oxford: Basil Blackwell, 1988) 4.

[25] This idea appears in Norman Malcolm's *Ludwig Wittgenstein: A Memoir* (London: Oxford University Press, 1958) 29.

[26] A well-known known example is Aristophanes' attack of hiccups in the *Symposium* [185c-e].

(3) Habermas asserts that:

> participants in argumentation who persist in trying to reach understanding … must be led by the gentle force of reasons to their own autonomous judgment. No collective authority restricts the individual's room for judgment or pre-empts his capacity to make judgments.[27]

Under an ideal-speech situation, participants in public debate are not coerced by external constraints that hinder or prevent an individual's assessment of evidence and argument. Further, each participant enjoys an equal opportunity to engage in and contribute to the discussion. By contrast, for Plato external constraints are inherent in a dialogue's location and participants, but he exploits those constraints to progress the argument and throw light on unexpected matters.

Indeed, Plato's works subvert Habermas's views on dialogue. For example, Socrates was executed – the ultimate external constraint on dialogic participation – but then appears as the central character in most of Plato's works, even though the shadow of Socrates' death falls over our interpretation of those dialogues. In the *Meno*, for example, Plato uses the ominous figure of Anytus to advance the argument, even though we (auditors and readers) know that Anytus was the most prominent of those who indicted Socrates. This dialogue is very far from Habermas's ideal-speech situation, yet it is a highly productive, insightful and serious work of philosophy.

(4) Further, Habermas asserts that:

> a communicatively achieved agreement must be based *in the end* on reasons. And the rationality of those who participate in this communicative practice is determined by whether, if necessary, they could, *under suitable circumstances*, provide reasons for their expressions.[28]

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[27] Jürgen Habermas, *Between Naturalism and Religion*, Ciaran Cronin trans. (Cambridge: Polity Press, 2008) 75.

[28] Habermas, *Communicative Action*, vol. 1, 17. *Italics* in original.

This view neglects discourse (such as narrative) that appeals to and influences the emotional brain. Agreement is often based on shared stories, particularly when parties cannot settle on a common set of reasons. Further, those who participate are not being irrational in acknowledging and using the power of narrative to effect an agreement.

(5) For Habermas, the ideal-speech situation is implicit in the nature of language in a modern society – the '*suitable circumstances*' noted in (4). It thereby provides an inherent critical standard against which deficiencies in current forms of dialogue can be assessed. This is an essentialist view of language against which Wittgenstein (in particular) railed.[29] In Plato's dialogues, on the other hand, there is no underlying ideal-speech standard that might be revealed if we sloughed off the situations and characters in and through which a dialogue is propelled. Habermas's use of (questionable) linguistic analyses to undergird his theory is fundamentally different from Plato's technique in which location and character are intrinsic, not incidental, to the message.

(6) Habermas's ideal of consensual transparency – that all parties could come to a rational consensus if they observed the rules of language – tends to preclude groups that are oppressed or regarded as different or deviant. Consensual transparency may thereby become a linguistic vehicle of domination and exclusion rather than mutual agreement.[30] Rather than listening to all sides (as Hampshire and Plato insist) the self-declared 'rational' bloc may arrogate to itself the right to declare that other viewpoints are irrational.

(7) Like the vast majority of researchers in this field, Habermas focuses on the characteristics of positive, productive communication, whereas negative, hostile and disingenuous communication is much less studied and sometimes regarded as a type of psychopathology. Plato's dialogues, on the other hand, often develop on the back of communicative failure with characters who are actively hostile or passively aggressive, or just plain dim-witted.

[29] See, for example, Garth L. Hallet, *Essentialism: a Wittgensteinian Critique* (Albany: State University of New York Press, 1991) especially chapter 6: Sources of Essentialism.

[30] As Ross Poole rightly observes (*Morality*, 82-83).

It is worth illustrating the difference between Habermas and Plato by considering the parlous state of politico-religious dialogue in America following four years of Donald Trump's presidency. According to Habermas, there exists an ideal-speech situation against which the inadequacies of such dialogue can be measured. Further, the structure of participants' communication 'neutralizes all motives other than that of the cooperative search for truth'.[31] This is too limited and neglects an important point – that lying, deception and myth-making may be inherent in, and the purpose of, such discourse. Habermas's ideas about the potential for rational consensus are of little use in attempting to understand, let alone combat, the counter-rational manipulative authoritarianism that drives dialogue by the evangelical right. For Plato, however, this group would provide a rich source of characters and irrationality with which to investigate and illuminate a religious movement's perverse support for the flagrantly irreligious Trump.

[31] Jürgen Habermas, *Moral Consciousness and Communicative Action*, Christian Lenhardt and Shierry Weber Nicholsen trans. (Cambridge, MA: MIT Press, 1990) 88-89.

Chapter 12
A Model Forum for Dialogue

Chapter 11 was an exercise in hermeneutics, fusing primordial and modern dialogic horizons to establish the characteristics of dialogue. The result is an enriched understanding of the dynamics and complexities of dialogue. The dramatic settings by which Plato frames his dialogues are integral to their philosophical substance, and the ways those settings and their interlocutors influence, vitiate, disorientate and occasionally clarify matters under discussion can inform our own approaches and reactions to dialogue. But what sort of setting, what sort of dialogic forum, might produce the level of comprehension, procedural justice and productive discussion that could address a crisis such as climate change? From our study of Plato's dialogues, and our own dialogic failures and occasional successes, the following attributes have emerged. A forum should:

(1) be adequately informed;
(2) be in public, or at least in a place where lack of integrity, particularly in argument, is exposed;
(3) be accepting of failure and therefore of changing one's mind;
(4) be open-ended, recognising that not every issue before it is capable of resolution;
(5) possess legislative clout, or at least be recognised by the legislature.

Concomitantly, a forum should *not*:

(a) produce perlocutionary frustration or illocutionary disablement;
(b) be regarded as a body where every issue before it has an answer or can be resolved;
(c) be based on dogma or an unexamined set of beliefs;
(d) be smug, dismissive and authoritarian.

These are broad criteria and do not specify a particular type of forum. For example, a law court goes some way to satisfying criterion (2). Courts are mostly held in public, and lack of integrity in argument is often exposed. This latter point is probably the main reason why no party in an Australian court has argued its case on the basis that anthropogenic global

heating does not exist.[1] Though climate change denial is rife in some sections of the media and government, it fails to satisfy basic forensic standards of evidence and reasonable inference that would allow it to be aired in court as the grounds for a defence or a claim. Unfortunately, courts are unlikely to satisfy criteria (3) and (4), let alone (a) and (b), and so do not fulfil other desirable characteristics.

A 'model' forum – New Zealand's youth mental health program

In the early 2000s, New Zealand's rate of teenage pregnancy was among the highest in the developed world. In 2009, Prime Minister John Key appointed Peter Gluckman, a paediatrician, as the country's first Chief Science Advisor. Key asked Gluckman about establishing a committee to study adolescent behaviour. Gluckman's view was that a standard 'stakeholder' committee would not be effective. These committees are politically popular because they give most stakeholders – the various groups that have a vested interest in or perspective on the matter – a voice at the table, so most parties are tolerably satisfied they have been heard. This feature is congruent with Hampshire's requirement to hear all sides of a matter, but such committees are often epistemic disappointments, contributing no additional knowledge or fresh points of view to the matter under investigation. Their recommendations are often expressions of banal compromise rather than specific directives.

Gluckman suggested that the academic community be commissioned to write a review of what was known and not known about issues relevant to teenage mental health. The report would investigate peer-reviewed literature only, and then itself be peer-reviewed. This report was compiled by a science committee, which culled any contributions that were perceived to stray beyond the data and/or introduce bias.

The prime minister then appointed a committee consisting of senior policymakers; its job was to come up with recommendations based solely on the report. These recommendations were reviewed by a further committee, chaired by Gluckman, to determine which of them had the best chance of succeeding and to ensure nothing important had been overlooked.

[1] Sean Ryan, 'Recent development in Australian climate change mitigation litigation – case studies in incrementalism' (Seminar, University of Tasmania, 27 April 2017). Ryan is from the Environmental Defenders Office, Queensland.

In 2012 the prime minister announced 22 new programs to address young people's mental health, a considerable financial impost on a small country recovering from the global financial crisis and the Christchurch earthquake. Key emphasised that these programs were based on the best available evidence, but that no-one could be certain they would all work. Therefore, an evaluation program was included so that experts could assess which programs were or were not effective. As Gluckman later said, 'everybody avoided hubris'.[2] Most politicians want to announce programs they know are very unlikely to fail, whereas Key candidly admitted that some of the new measures might not work. Moreover, the public recognised this was the best possible response given the knowledge base available, and accepted that a government cannot always get things right. Gluckman's summary is noteworthy: 'this was a very good example of how the science, policy and political communities can work together'.[3]

This example satisfies all the above criteria for a forum. Under (b), for instance, the views and needs of young females, a group especially vulnerable to locutionary frustration and disablement, were central rather than peripheral to the process. Under (2), the first stage of the process – the science committee report – was aggressive in eliminating points of view for which there was insufficient evidence. This is important in addressing a potential weakness in Hampshire's requirement to hear all sides of a matter. In practice, hearing all sides might amount to little more than an opportunity for airing hobbyhorses – for example, religious groups which reject VAD outright simply because they feel it is contrary to god's will – in which case the forum may degenerate into a shouting match. Given the success of Gluckman's process in a very contentious and emotive area, it may be appropriate to articulate Hampshire's thesis more precisely: all sides should be heard, but only insofar as they contribute to the 'epistemic fund' that will inform a decision on the matter under debate. In other words, a forum's terms of reference should preclude any contribution for which there

[2] Quoted in Shawn Otto, *The War on Science* (Minneapolis: Milkweed, 2016) 391. Otto interviewed Gluckman about the role of scientific advice in formulating policy.

[3] Ibid. Though the rate of teenage pregnancy has fallen ['New Report on Maternity finds drop in teenage pregnancies', Ministry of Health media release (12 April 2019)] overall child mental health in New Zealand remains poor [Anna Gromada et al., *Worlds of Influence: Understanding what shapes child well-being in rich countries*, Innocenti Report Card 16 (Florence: UNICEF, 2020)]. Even a model forum is no guarantee of success.

is no direct evidence and/or no reasonable inference from indirect or anecdotal evidence. This still allows for all sides to be heard, but constrains views that admit no grounds for argument or discussion.

A model forum for addressing climate change?

If they were to succeed, the Gluckman committees required more than meeting the above criteria, and participants of constructive goodwill, and so on. They also required:

(i) government support, including adequate financial provision that extended beyond the government's term of office. An incoming government had to accept a financial burden imposed by its predecessor, and an outgoing government had to accept that the rewards of its endeavours might be reaped by its successor. Most governments are loath to accept either.

(ii) a propitious political environment. Good ideas are not acted on or implemented simply because they have intrinsic merit; they also require a favourable political climate. On the other hand, bad ideas can thrive in certain conditions, not necessarily because we mistake them for good ideas but because their deficiencies are less obvious or are glossed over.

(iii) community perception and appreciation that the matter needed to be addressed. This may require communication skills beyond the competency of most governments, not because governments are poor communicators but because the subject is not amenable to slogans and soundbites.

(iv) luck. When criteria (1) to (5), and (a) to (d), and (i) to (iii) are aggregated, it is not surprising that good ideas are difficult to implement.

Communicating climate change – 'Know thy audience, know thyself, know thy stuff'[4]

We have developed a list of dialogic characteristics, and know what an effective forum might look like, but dialogue about climate change presents a specific set of challenges that must also be addressed. As Max Boykoff observes, most communication about climate change follows the traditional path of transmitting information with a goal to overcoming

[4] Stephen H. Schneider, quoted in Maxwell Boykoff, *Creative (Climate) Communications* (Cambridge: Cambridge University Press, 2019) 190. We met Schneider in chapter 3.

people's epistemic deficit and thereby changing their behaviour. This 'hitting people over the head with science' approach to communication can occasionally succeed, but has clearly been a failure with regard to climate change.[5] For decades scientists have been telling the world about global heating, yet carbon emissions continue to rise and more than a few leaders, and citizens in their countries, and have refused to listen. In response, Boykoff proposes five rules for effective communication about climate change: (1) be authentic; (2) be aware; (3) be accurate; (4) be imaginative; (5) be bold.[6] The first three encompass the pithy quote (above) from Stephen Schneider, but all are characteristics of Socratic dialogue.

(1) Be authentic – know thyself.[7] This is about authentically communicating your passions (anger might be one of them) and concerns, particularly for those most vulnerable to climate change. Confected anger, phoney concerns and clichéd calls to action are inauthentic and ineffectual. This is not a demand for the 'right' sort of authenticity. If you are cynical and abrupt, you can't be authentic by pretending otherwise.

Socrates is a paradigm of the endeavour to know oneself and be authentic. In the *Phaedrus*, after giving an astute euhemeristic interpretation of a local legend, Socrates confesses he has no time to pursue such matters because 'I am still unable, as the Delphic inscription orders, to know myself; and it really seems to me ridiculous to look into other things before I have understood that' [229c-230a]. On the other hand, doesn't Socrates occasionally resort to crooked inferences and false arguments in order to win a point? In the *Protagoras*, for example, Socrates' arguments about the meaning of a poem are almost a sham, while his assertion that more wise men are to be found in Crete and Sparta than anywhere else is a derisive irony [341a-342b].[8] Gregory Vlastos argues that Socrates can indeed be tongue-in-cheek and craftily deceptive, but *not* when he is arguing seriously, not when engaged in elenctic argument in his search for the right way to live.[9] As Socrates states

[5] Boykoff, 54-55.

[6] Ibid., 208-211.

[7] An inscription on the temple of Apollo at Delphi. Socrates refers to it in several dialogues, such as the *Protagoras* 343b. The inscription was γνωθι σαυτον (*gnothi sauton*, 'know thyself').

[8] Crete and Sparta were regarded as among the least intellectual communities in Hellas. In the *Republic*, Plato equates them with timarchy – rule by people dominated by passions rather than rationality [545b-550c].

[9] Vlastos, 133-135.

in the *Charmides*, even if he were to refute everything his interlocutor said, he would do so for the same reason that would motivate him to investigate his own words – 'the fear of unconsciously thinking I know something when I do not. And this is what I claim to be doing now, examining the argument primarily for my own sake' [166c-d]. If Socrates were duplicitous and insincere in his quest, he would be cheating not only his interlocutors but also himself. It is clear that self-discovery is an important part of authentic communication.

Socrates embodies authenticity in being both single-minded and multi-dimensional. His quest is divinely inspired, and to it he brings his own irrepressibly human qualities: he is humorous and obstinate, and often disappointed; he is never ingratiating, and rarely generous to a flummoxed opponent.

(2) Be aware – know thy audience. This rule includes being mindful of what your audience really cares about, as opposed to what you think it should care about, and being aware of effective or ineffective engagement. The Socratic dialogues are exemplars of tailoring arguments to audiences. Socrates knows most of his interlocutors. Within a single dialogue he will adapt his manner and approach to each interlocutor: friendly and respectful to one, provocative to another, and so on.[10] Plato assumes, or even demands, that his readers/listeners are aware of the characteristics and circumstances of Socrates' interlocutors. Indeed, Plato usually blames these interlocutors for Socrates' frequent lack of dialectical success, a sober warning that even comprehensive knowledge of one's audience does not ensure success.

(3) Be accurate – know thy stuff. This is more than knowing facts about climate change. It includes being able to translate scientific knowledge into information that is relevant and salient for decision-makers. Boykoff notes that the 'information-deficit model' of communicating scientific knowledge has repeatedly been exposed as inadequate, yet most of us continue to assume that poor choices are the result of an information deficit, and therefore additional knowledge will lead to better choices.[11] The reasons for this model's endurance are instructive. Molly Simis et al. argue that scientific training – the 'rational processing of information to draw conclusions based on empirical information' – leads practitioners to

[10] As Ruby Blondell observes, particularly with regard to the *Republic* (Blondell, 187).

[11] Boykoff, 60-61.

believe that public audiences 'can and do process information in a similar manner'.[12] This is often not the case. For example, Ralph Keeney notes that the biggest killer of Americans is not cancer, heart disease, obesity or smoking. Rather, it is their inability to make choices that are not self-destructive.[13] Michael Specter cites the British example of Cherie Blair, a prominent public figure and QC. Blair was 'in two minds' about whether to vaccinate her son Leo (born in 2000) because she had listened to people 'whose views I respected' and who were 'vociferously against all forms of vaccination'.[14] Specter contrasts Blair's irrational ambivalence to the rational evidence-based confidence of her husband's prime ministerial forebear, Robert Walpole, who in 1724 obtained vaccinations for George I's children to inoculate them against smallpox. It is confronting that, after nearly three centuries of clear evidence, the very intelligent Blair was less able to assess the benefits of vaccination than George I. As Specter despondently concludes, 'even when the scientific evidence is overwhelming, people don't always believe it'.[15]

Further, Brianne Suldovsky found that the public information-deficit model was driven by 'the role of science as an epistemic authority' because 'it forces communication to function in a top-down, one-way structure where knowledge trickles down from an epistemic authority (scientists) to a knowledge-deficient audience.'[16] The epistemic authority model does not usually work well for the public, but it does work for scientists because it offers an 'intuitive and optimistic' explanation for the gulf between science and society. Part of the problem here is that if scientists were to engage in dialogue more than dictate they might (with reason) feel they were yielding some of their epistemic authority and moving beyond their comfort zones of communication. As Carina Cortassa put it:

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[12] Molly J. Simis et al., 'The lure of rationality: Why does the deficit model persist in science communication?', *Public Understanding of Science*, vol. 25(4) (2016) 401.

[13] Noted in Dan Ariely, *Predictably Irrational* (New York: HarperCollins, 2009) 166. Keeney estimates that about half of US citizens will make a lifestyle decision that will result in premature death.

[14] Michael Specter, *Denialism* (London: Duckworth Overlook, 2010) 86-87. Leo was eventually vaccinated.

[15] Specter, 87. It is interesting that Tony Blair decided to join America's invasion of Iraq in 2003, a decision based on flimsy evidence that most people with only modest interest in the matter knew was false.

[16] Brianne Suldovsky, 'In science communication, why does the idea of the public deficit always return? Exploring key influences', *Public Understanding of Science*, vol. 25(4) (2016) 420.

> Once the starting status of ignorance has been established, the task is to apply the correctives needed – to inject cognitive resources – periodically assessing progress until the pursued levels of literacy are achieved.[17]

One is reminded of Dickens' Thomas Gradgrind, whose pedagogical method was to 'have imperial gallons of facts poured into [his pupils] until they were full to the brim'.[18] This model assumes a positive correlation between a society's scientific knowledge and its capacity to appraise scientific matters. There is evidence to suggest otherwise,[19] but that is not the real issue – which is that general scientific literacy is not a function of the quantity of scientific information we are collectively supposed to have imbibed. Rather, it is much more a function of how a society *uses* scientific knowledge. A society might regard itself as scientifically enlightened, but this assumption is worth little if its store of scientific knowledge is unable to inform or mobilise a response to a threat like climate change.

Prima facie, Socrates can have nothing to say about this rule, given that he disavows possessing knowledge at all. However, his epistemic concern was solely with knowledge in the moral domain.[20] Indeed, Socrates personifies the difference between epistemic certainty and moral certainty: more importantly, he embodies the view that neither is required as a condition for action. For example, in the *Laches* Socrates asks his interlocutors for a definition of courage – that is, the quality all acts of courage have in common. He mildly rebukes them because they provide examples rather than a definition. His message is clear: knowledge of examples does not entail the more fundamental knowledge of something in and of itself. Conversely, though, lack of epistemic certainty does not preclude an ability to act. Among the participants in this dialogue, Laches and Nicias are well-known Athenian generals. They are not able to define courage, but that does not nullify their capacity to act

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[17] Carina Cortassa, 'In science communication, why does the idea of a public deficit always return? The eternal recurrence of the public deficit', *Public Understanding of Science*, vol. 25(4) (2016) 449 for this and the previous quote.

[18] Charles Dickens, *Hard Times*, ch. 1.

[19] Cortassa cites a number of studies and examples. See also the excursus at the end of this chapter.

[20] As Gregory Vlastos points out [Vlastos, 237]. Indeed, in the *Menexenus* Socrates states that 'all knowledge [*episteme*] cut off from rectitude and the rest of virtue has the look of low cunning, not wisdom' [246e-247a].

courageously. Indeed, if we demanded epistemic certainty as a prior condition for action, we would probably do little or nothing.[21]

This observation illuminates an important question: what level of evidence, though falling short of epistemic certainty, is enough to support the degree of moral certainty required to act prudently? Gregory Vlastos argues that this level is reached when the cost of not acting, based on the doubt, would be prohibitive.[22] Socrates would agree: if he and Laches had hesitated in their retreat from Delium because they were not sure whether a retreat could also be 'courageous', they would have perished.[23] Similarly, if we are unable to achieve epistemic certainty about climate change, this does not absolve us from acting on it, given that the cost of not acting will almost certainly become prohibitive.

(4) Be imaginative: this rule 'involves a nimbleness, agility and ability to adapt to changing communication contexts'.[24] It also involves a willingness to take risks and possibly make mistakes. This is probably the most Socratic of the five rules. As we have seen, Plato's dialogues are mostly set in public, a dramatic context that is constantly changing and subject to random events, and over which Socrates has little control. He conducts his discussions with people who range from receptive to dismissive. Importantly, Socrates does not merely refute arguments, as if they were disembodied thoughts possessing an independent existence apart from the characters who air them. He refutes people, questioning their beliefs, social roles and ways of life. As Mary Blundell argues, 'the elenchus is thus an intrinsically *ad*

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[21] So Vlastos, 269. This applies particularly to governments that demand epistemic certainty before they enact new or revised laws. This perceived level of certainty is a false comfort because for any law there is potentially an infinite number of ways to interpret it. Wittgenstein noted the paradox: 'no course of action could be determined by a rule, because every course of action can be brought into accord with the rule' [*Philosophical Investigations* #201]. For example, VAD bills are or were stalled for years because governments endeavoured to cover every possible situation and ramification. This is not only impossible but also had the unintended (Wittgenstein would say 'foreseeable') consequence of making conditions unnecessarily difficult for terminally ill people to die on their own terms.

[22] Vlastos, 269.

[23] The Athenians were defeated at Delium, about 45 kms north of Athens, in 424. The retreat is mentioned in *Laches* 181a-b.

[24] Boykoff, 210.

hominem form of argument of a particularly personal kind'.[25] In other words, Socrates takes seriously the character and responses of each interlocutor and the context in which he interrogates them, and adapts his approach accordingly. Unless we pay attention to dramatic characterisation and context we will appreciate neither the force of Socrates' questioning nor his elenchic flexibility.

However, this degree of flexibility also carries risk. In the *Protagoras*, for example, Socrates suggests that he and Protagoras should exchange questions and answers, a suggestion to which Protagoras 'was altogether unwilling' [338e]. Though Socrates established the frame of discourse, he is soon floundering. Protagoras asks him whether he thought two seemingly contradictory passages from the same poem were consistent. Socrates replies that he did, 'though at the same time I was afraid that he [Protagoras] might be right' [339c]. Protagoras points out the obvious inconsistency, which wins a shout of approval from those present. Socrates is stunned: 'my eyes went dim and I felt giddy, as if I had been hit by a good boxer' [339c]. Resorting to tactical cunning, he plays for time, asking a tangential question to Prodicus, a sophist and teacher of rhetoric for whom Socrates appears to have had some respect. Socrates' contribution to the ensuing discussion is a mixture of skilful dialectic repair, questionable assumption and leg-pulling, but he steers the dialogue back to where he can resume his main argument. Socrates ingenuously assures Protagoras that he has no other aim than to get to the bottom of problems that had always puzzled him [348a]. This dialogue is a master-class in adaptability and dialogic recovery. It is also a paradigm of sincerity in argument and suitable respect for one's interlocutors.

(5) Be bold: part of this rule involves reducing or overcoming psychological barriers – and, I suggest, social and legal barriers – to engagement. Few are bold without someone else having first kicked over a barrier: an initial act of boldness and leadership can become a catalyst for group solidarity.

Socrates' boldness could be confronting. In the *Apology* he states he would be ashamed if he were not to stand firm and face danger on a battlefield when ordered by a commander to

[25] Mary Whitlock Blundell, 'Character and Meaning in Plato's *Hippias Minor*' in *Methods of Interpreting Plato and his Dialogues*, Oxford Studies in Ancient Philosophy, Supplementary Vol. 1992, James C. Klagge and Nicholas D. Smith eds (Oxford: Clarendon Press, 1992) 133 [italics in original].

do so, but more ashamed if, from fear of death or something else, he disobeyed the god who ordered him to live a philosophical life [28d-29a]. Socrates recognised that through his questioning of prominent citizens he had made powerful enemies [*Apology* 21d], but even when threatened, as he is by Anytus in the *Meno*, Socrates does not resile from his mission.[26] He warns those, and us, who think to ally themselves with his quest 'that the majority of people don't agree with us'.[27]

Excursus – scientific literacy, climate change and witch-hunts

We need at least a basic understanding of climate science if we are to understand global heating, and we assume that the more we know about it the more likely we are to address it. In other words, we assume there is a correlation between scientific knowledge and the desire to take appropriate action. However, there are plenty of examples where this assumption is false. One instructive example is the period of witch-hunting in early modern Europe.

Most of us regard witch-hunts as the product of medieval superstition and ignorance, as characterised in *Monty Python and the Holy Grail*. We assume that people came to their senses following the rise of modern science. In fact, witch-hunting increased *after* the medieval era: the period of most virulent prosecution was from the mid-1500s to the mid-1600s. In other words, witch-hunting's most lethal episodes coincided with the rise of modern science. The reasons for this are complex and geographically diverse.[28] It seems perplexing that even in England, which had many fewer witch trials and executions than most other countries, the last judicial killing of witches was in 1682, a decade after Isaac Newton had completed the scientific exertions which would later be published as *Principia Mathematica* (1687). It is much less perplexing when we realise that Newton derived his concept of force, the *Principia's* foremost scientific theory, from notions of occult powers in the tradition of natural magic.[29] Moreover, for Newton the most important part of that

[26] *Meno* 94e-95a. Anytus became one of Socrates' accusers.

[27] *Protagoras* 352d.

[28] For a good account see Brian P. Levack, *The Witch-hunt in Early Modern Europe*, 2nd ed. (London: Longman, 1995). It is salutary to realise that, per head of population, Scotland executed 12 times as many witches as England, yet for most of this period Scotland possessed four universities while England had only two.

[29] John Henry, 'Newton, matter, and magic' in *Let Newton be!*, John Fauvel et al. eds. (Oxford: Oxford University Press, 1988) 143.

tradition was alchemy, so it is unsurprising to find that in about 1669 Newton began a detailed and long-term study of the subject. Less well known is Newton's belief in Pythagorean harmonics and numerological correspondences. He supposed, for example, that the spectrum of visible light would correspond to the seven divisions of the musical scale.[30] Consequently, generations of children have learned mnemonics about the seven colours of a rainbow, when in fact there are only six. It is an astonishing survival of 'magical thinking' into the current era. As B. J. Gibbons observed with reference to the work of Newton, Kepler, and even Wolfgang Pauli, 'far from inevitably dispelling the dark clouds of "superstition", science has often encouraged magical thought'.[31]

It is clear that scientific and non-scientific thought can, happily or uneasily, co-exist. Of course science will eventually change or demolish at least some popular or non-scientific beliefs, but in turn some of those beliefs will influence science, as they did with Newton. Either way, there is no direct correspondence between scientific advances, broader scientific literacy and a society's actions. In England, the witchcraft statute was not repealed until 1736, even though general intellectual support for witch-hunting had long vanished.[32] It is clear that a government's action can be uninformed by contemporary science, and may lag well behind, or correspond little to, the views of its citizens. This is an accurate description of the current situation in Australia, and many other countries, with regard to climate change.

There are further, and disturbing, lessons from the era of witch-hunts. Ideally, witchcraft should have been investigated by a stringent examination of evidence: if there were no evidence for the existence of witches, then witch-hunting should have stopped or been

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[30] Penelope Gouk, 'The harmonic roots of Newtonian science' in *Let Newton be!*, 118. The mnemonic I learned in school was 'Richard Of York Gave Battle In Vain' – red, orange, yellow, green, blue, indigo, violet. The last two are actually one colour – violet. There is no indigo.

[31] B. J. Gibbons, *Spirituality and the Occult* (London: Routledge, 2001) 52. Pauli (1900-1958) was possibly the most brilliant, certainly the most acerbic, of the second generation of quantum physicists. His epistemology owed a great deal to Jungian archetypes.

[32] For example, as early as 1584 Reginald Scot's *Discoverie of Witchcraft* questioned the juridical evidence used in witchcraft trials, and Thomas Hobbes' *Leviathan*, part IV, chapter 45 (1651) undermined any scriptural and philosophical support for the existence of witches. See Alan Charles Kors and Edward Peters eds, *Witchcraft in Europe, 400-1700*, 2nd ed., revised by Edward Peters (Philadelphia: University of Pennsylvania Press, 2001) 392-425.

outlawed long before the mid-1600s. The problem was, and is, that matters are rarely circumscribed to the degree that a single argument or investigation will settle the question. In the 1600s, for example, theologians argued that if belief in witches were undermined then belief in other supernatural agencies would also decline.[33] It was a standard thin-end-of-the-wedge argument, and it has alarming parallels in the debate about climate change.

If you believe that your country's way of life is undergirded by fossil fuels then you might see an attempt to replace them with renewable energy as a threat to your lifestyle and ethos. In 2019, for example, Labor Party policy to increase Australia's fleet of electric vehicles was construed as an attack on tradespeople and their 'utes', while a policy to increase renewable energy was interpreted as the end of family outings to football played under lights. These examples appear trivial, but they are driven by a very broad set of ideas. For example, the University of Wollongong offers a degree funded by the Ramsay Centre for Western Civilisation. The centre's chairman and one of its board members are former prime ministers – John Howard and Tony Abbott – and both are climate change sceptics. Indeed, the centre's blurb lists repealing a carbon tax as one of Tony Abbott's achievements.[34] Whatever one thinks about the centre, there can be little doubt about one of its subliminal messages: acknowledgement of climate change, let alone addressing it, is a threat to western civilisation.

There is a further lesson to be gleaned from the decline of witch-hunting. As John Redwood notes, 'reason' and 'nature' were the words most frequently appealed to in debate during the late 1600s and early 1700s.[35] Debate was ideally construed as a contest between reasonable suppositions and arguments founded on facts amassed from observations of the natural world. Prima facie, this is also the appropriate procedure for addressing climate change. However, as Redwood further notes, reasonable people, contemplating the same facts, came to very different opinions about the world and about the morals they should consequently espouse. Reason and nature were not unifying concepts representing a consensus approach to understanding; rather, they were bones of contention, significant more of conflict than intellectual harmony. The upshot was that matters of spiritual import, such as witchcraft, were decided as much by irony, wit and ridicule as they were by reasoned

[33] John Redwood, *Reason, Ridicule and Religion* (London: Thames and Hudson, 1976) 11.

[34] www.ramsaycentre.org/about-us/board-of-directors

[35] Redwood, 12-14, 215.

explanation and evidence.[36] Witch-hunts were vanquished by laughter as much as by arguments from reason and nature. Absent the efficacy of appeals to scientific reason, it might be that climate change deniers are best tackled by ridicule.

Conclusion

Dialogue can be difficult, and dialogue about climate change can be especially thorny, but we know how dialogue works and how to communicate effectively about global heating. However, we also need a forum which not only hears all sides but also validates the views of those who have hitherto been voiceless. In particular, this forum must listen to the views of people who currently have no voice at all – children and those not yet born. As R. S. Scorer put it, 'we need people in our deliberations whose job it is to represent posterity'.[37] In that sense, an effective forum would also entail the capacity to imagine ourselves in (say) 2060, wishing that our forebears had done things differently when they knew the consequences of their inaction.

[36] As Michel de Montaigne wryly commented, 'The witches of my neighbourhood are in mortal danger every time some new author comes along and attests to the reality of their visions' ['Of Cripples' in *The Complete Works*, Donald M. Frame trans. (New York: Everyman's Library, 2003) 959]. Montaigne wrote this in 1588, a rare early disparagement of witch-hunting.

[37] R. S. Scorer, *The Clever Moron* (London: Routledge & Kegan Paul, 1977) 158.

What hope, at this rate, of extinguishing the taste of the bathos implanted by nature itself in the soul of man?[1]

Conclusion

Our collective failure to address climate change is existentially confronting and intellectually debilitating. Addressing a problem like global heating demands an ascent to the best of our abilities and vision, not a predilection for descent into bathos. The most ominous conclusion that might be drawn from this study is that our intellectual and cultural heritage has left us lacking the wherewithal to tackle global heating. However, it is equally possible to conclude that, by revisiting the primordial roots of our philosophical tradition, we can achieve the means to surmount our failures of dialogue.

This study was not novel in using an interdisciplinary approach, but the combination of disciplines is novel. By comparison, an important text in this field says little to nothing about dialogue, narrative, hermeneutics or psychology. When one contributor states, 'facts will always call forth our moral responses',[2] we know from our study of the emotional brain (chapter 6) that it would be more accurate to substitute 'rarely' for 'always'.

Probably the most original part of this study is the fusing of hermeneutic horizons – ancient Greece's with climate change – so that each throws light on the other. In this way, the genocide of ancient Melos was interpreted through the perspectives of risk analysis and folly. More importantly, modern failure to address climate change drove an examination of the dramatic settings of Plato's dialogues. In addition to a list of dialogic characteristics, two unexpected findings were that dialogues set indoors are presented very differently from those set outdoors, and Plato's reluctance to set any dialogue in the Athenian agora.

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[1] Matthew Arnold, 'Culture and Anarchy' (1867) in *The Portable Matthew Arnold*, The Viking Portable Library, 545.

[2] Jenneth Parker, 'Towards a dialectics of knowledge and care in the global system' in *Interdisciplinarity and Climate Change*, Roy Bhaskar et al. eds (Abingdon: Routledge, 2010) 221.

What about Iris?

Let us return to Iris, whom we met in the Introduction. By 2060, Iris will probably be living in a world that has, to some degree, addressed climate change. However, GHG mitigation strategies then in place are unlikely to offset the cumulative failures of previous generations to take effective action. One or more environmental tipping points are likely to have been triggered, and governments will find that reducing emissions to near zero is only one step in the formidable task of reducing atmospheric CO_2 to a more sustainable 380 ppm. Iris will probably feel resentment towards past generations. How will she explain to her daughter (Ruby) why the generation in which Iris was a child did so little to reduce emissions, and why the four decades before it were significant mainly for their profligate and myopic consumption of fossil fuels? Iris might explain to Ruby that failure to address climate change was a result of one or more of the following:

- folly: the almost limitless human capacity to make poor decisions in the face of overwhelming evidence that they are, indeed, poor decisions;
- flawed risk assessment: individuals and groups not only tend to be inept at assessing risk but are also inclined to 'accept' risk on behalf of those who, like Iris and Ruby, have no say in the matter;
- lack of appeal to the emotional brain: the failure of previous generations to overcome the problem that climate change does not trigger our evolved emotional responses;
- bewildering sociological phenomena: the identity of some groups is based substantially on their difference from other groups, to the degree that group identity becomes more important than the values maintained by, or even the wellbeing of, those groups;
- poor governance: most governments, particularly those in the Anglophone world, are poorly equipped to address a problem that requires a fundamental change in the way we live.

Perhaps Iris will also explain that, underlying these reasons, was an inability to imagine a different way of doing things. As Fredric Jameson stated in the mid-1990s, 'it seems to be

easier for us today to imagine the thoroughgoing deterioration of the earth and of nature than the breakdown of late capitalism; perhaps that is due to some weakness in our imaginations'.[3]

Perhaps, though, by 2060 climate change might have been addressed to the extent of reducing atmospheric carbon to the levels of 2020. Iris may be able to point to improvements in the way groups and governments discussed and resolved a global problem. She might even explain to her daughter that, fed up with dialogic failure, people returned to their dialogic heritage and rediscovered the rewards that come with participation in dialogue, and concomitantly established fora in which Ruby's generation was given a voice in decisions that were going to affect it.

Back to the agora!

Sometime after Socrates' death, Plato retreated into the Academy. The agora had been Socrates' haunt, but it was too confronting and dangerous a space in which to conduct philosophical dialogue, even in writing. Only one of Plato's works is set in the agora, in front of the building in which Socrates was about to face his indictment. Plato's condemnation of the agora is palpable, but he leaves us in no doubt that genuine dialogue, the primordial method by which we clarify our thinking and discuss important issues, is a matter of public participation. If we are to address climate change we need to reclaim the modern agora, the political and commercial heart of our society. Back to the agora!

[3] Fredric Jameson, *The Seeds of Time* (New York: Columbia University Press, 1994) xii. Some of the matters adumbrated by Jameson have been thoroughly examined by others and therefore have not been discussed in this monograph. See, for example, Naomi Oreskes and Erik M. Conway on campaigns to mislead the public about the science of climate change [*Merchants of Doubt* (London: Bloomsbury Publishing, 2010)] and Joel Bakan on the sociopathy of corporations [*The Corporation* (London: Constable, 2005)].

BIBLIOGRAPHY

Ackrill, J. L., *Aristotle the Philosopher* (Oxford: Clarendon Press, 1981)

Ahlstrom, Sydney E., *A Religious History of the American People* (New Haven: Yale University Press, 1972)

Ariely, Dan, *Predictably Irrational* (New York: HarperCollins, 2009)

Arnold, Matthew, 'Culture and Anarchy' in *The Portable Matthew Arnold*, Lionel Trilling ed., The Viking Portable Library (undated – first published 1867) 469-573

Aronson, Ronald, *The Dialectics of Disaster* (London: Verso, 1983)

Austin, J. L., *How to Do Things with Words*, J. O. Urmson and Marina Sbisà eds., 2nd ed. (Cambridge, MA: Harvard University Press, 1975 – originally published 1962)

Bakan, Joel, *The Corporation* (London: Constable, 2005)

Barnes, Jonathan, 'Rhetoric and Poetics' in *The Cambridge Companion to Aristotle*, Jonathan Barnes ed. (Cambridge: Cambridge University Press, 1995) 259-285
– *Proof, Knowledge, and Scepticism* (Oxford: Clarendon Press, 2014)

Barr, James, *Fundamentalism* (London: SCM, 1977)

Batrinos, Menelaos L., 'The length of life and eugeria [happy old age] in classical Greece', *Hormones* 7.1 (2008) 82-83

Beck, Ulrich, *World at Risk*, Ciaran Cronin trans. (Cambridge: Polity Press, 2009 – first published 2007)

Becker, Jasper, *hungry ghosts: China's secret famine* (London: John Murray, 1996)

Berman, Marshall, *All That Is Solid Melts Into Air* (London: Verso, 1983)

Best, Ernest, *A Commentary on The First and Second Epistles to the Thessalonians* (London: Adam and Charles Black, 1979 – first published 1972)

Bhaskar, Roy; Frank, Cheryl; Høyer, Karl Georg, Næss, Petter and Parker, Jenneth eds, *Interdisciplinarity and Climate Change* (Abingdon: Routledge, 2010)

Birstein, Vadim J., *The Perversion of Knowledge* (Cambridge, MA: Westview Press, 2001)

Blackburn, Simon, *Truth* (London: Penguin, 2005)

Blondell, Ruby, *The Play of Character in Plato's Dialogues* (Cambridge: Cambridge University Press, 2002)

Blundell, Mary Whitlock, 'Character and Meaning in Plato's *Hippias Minor*' in *Methods of Interpreting Plato and his Dialogues*, Oxford Studies in Ancient Philosophy, Supplementary Vol. 1992, James C. Klagge and Nicholas D. Smith eds (Oxford: Clarendon Press, 1992) 131-172

Bohm, David, *On Dialogue* (London: Routledge Classics, 2004 – originally published 1996)

Bolin, Bert, 'The Carbon Cycle', *Scientific American*, Vol. 223, No. 3 (September 1970) 124-135

Borgmann, Albert, *Crossing the Postmodern Divide* (Chicago: University of Chicago Press, 1992)

Bos, René ten, 'The Vitality of Stupidity', *Social Epistemology*, vol. 21, no. 2 (April-June 2007) 139-150

Boulding, Kenneth E., 'Economics and Ecology' in *Future Environments of North America*, F. Fraser Darling & John P. Milton eds (Garden City, New York: The Natural History Press, 1966) 225-34, and *passim* in discussion.

Bourdieu, Pierre, *The Political Ontology of Martin Heidegger*, Peter Collier trans. (Cambridge: Polity Press, 1991 – originally published 1988)

Boykoff, Maxwell, *Creative (Climate) Communications* (Cambridge: Cambridge University Press, 2019)

Broome, John, *Climate Matters: Ethics in a Warming World* (New York: W. W. Norton, 2012)

Brown, Rupert, 'Intergroup Relations' in *Introduction to Social Psychology*, Miles Hewstone, Wolfgang Stroebe, Jean-Paul Codol and Geoffrey M. Stephenson eds (Oxford: Basil Blackwell, 1988) 381-410

Bugliosi, Vincent, *The Betrayal of America* (New York: Thunder's Mouth Press / Nation Books, 2001)

Bunzl, Martin, *Uncertainty and the Philosophy of Climate Change* (Abingdon, Oxon: Routledge, 2015)

Burckhardt, Jacob, *The Greeks and Greek Civilization*, Sheila Stern trans. (New York: St Martin's Press, 1998 – from lectures originally delivered in 1872)

Butler, Christopher, *Postmodernism: A Very Short Introduction* (Oxford: Oxford University Press, 2002)

Camus, Albert, *The Plague*, Stuart Gilbert trans. (Harmondsworth: Penguin, 1960 – originally published 1947)

Chalk, Frank and Jonassohn, Kurt, *The History and Sociology of Genocide* (New Haven: Yale University Press, 1990)

Chappell, Timothy, *Reading Plato's Theaetetus* (Indianapolis: Hackett Publishing, 2005)

Chomsky, Noam, *Language and Problems of Knowledge* (Cambridge, MA: MIT Press, 1988)
– *Who Rules the World?* (London: Penguin Books, 2017)

Chou, Eileen Y.; Parmar, Bidhan L.; Galinsky, Adam D., 'Economic Insecurity Increases Physical Pain', *Psychological Science*, Vol. 27, No. 4 (April 2016) 443-454

Cleveland, William L., *A History of the Modern Middle East*, 3rd ed. (Boulder, CO: Westview Press, 2004)

Coady, David and Corry, Richard, *The Climate Change Debate: An Epistemic and Ethical Inquiry* (Basingstoke: Palgrave Macmillan, 2013)

Cobern, William W., and Loving, Cathleen C., 'Defining "Science" in a Multicultural World: Implications for Science Education', *Science Education*, Vol. 85, No. 1 (2001) 50-67

Collingwood, R. G., *An Autobiography* (Oxford: Oxford University Press, 1978 – first published 1939)

Commoner, Barry, *The Closing Circle* (London: Jonathan Cape, 1971)

Cornford, F. M., *Microcosmographia Academica* (London: Bowes & Bowes, 1964 – first published 1908)

Cortassa, Carina, 'In science communication, why does the idea of a public deficit always return? The eternal recurrence of the public deficit', *Public Understanding of Science*, vol. 25(4) (2016) 447-459

Cropper, William H., *Great Physicists* (New York: Oxford University Press, 2001)

Curthoys, Jean, *Feminist Amnesia* (London: Routledge, 1997)

Davy, Benjamin, *Essential Injustice* (Wien: Springer-Verlag, 1997)

Dawidowicz, Lucy S., *A Holocaust Reader* (West Orange, NJ: Behrman House, 1976)

Dean, Tim, 'Changing minds', *New Philosopher*, 26 (Nov. 2019 – Jan. 2020) 34-37

Denniss, Richard, *Dead Right: How Neoliberalism Ate Itself and What Comes Next*, Quarterly Essay, Issue 70 (Carlton, Victoria: Black Inc., 2018)

Deutscher, Max, *Subjecting and Objecting* (St Lucia: Queensland University Press, 1983)

Dickins, Charles, *Hard Times* (London: Penguin, 1969 – first published 1854)

Dietrich, Walter, '1 and 2 Kings' in *The Oxford Bible Commentary*, John Barton and John Muddiman eds (Oxford: Oxford University Press, 2001) 232-266

Dixon, Norman F., *On the Psychology of Military Incompetence* (London: Jonathan Cape, 1976)

Donovan, Brian R., 'The City and the Garden: Plato's retreat from the teaching of virtue', *Educational Theory* (Fall 1995, Vol. 45, No. 4) 453-464

Douglas, Mary, *Natural Symbols*, 2nd ed. (London: Barrie and Jenkins, 1973 – first ed. 1970)
– *A Course on Cultural Theory: The Group/Grid Model* (Semiotics Institute Online, 2006)
– and Wildavsky, Aaron, *Risk and Culture* (Berkeley: University of California Press, 1982)

Dreyfus, Hubert L., *On the Internet* (London: Routledge, 2001)

Dryzek, John S., *The Politics of the Earth* (Oxford: Oxford University Press, 1997)

Dubois, Elizabeth and Black, Grant, 'The echo chamber is overstated: the moderating effect of political interest and diverse media', *Information, Communication & Society*, vol. 21, no. 5 (2018) 729-745

Dunn, J. D. G., 'Ephesians' in *The Oxford Bible Commentary*, John Barton and John Muddiman eds (Oxford: Oxford University Press, 2001) 1165-1179

Durkheim, Emile, *The Rules of Sociological Method*, Sarah A. Solovay & John H. Mueller trans. (New York: The Free Press, 1964 – originally published 1895)

Edwards, Mark W., 'Agamemnon's Decision: Freedom and Folly in Aeschylus', *California Studies in Classical Antiquity*, 10 (1977) 17-38

Edyvane, Derek, *Civic Virtue and the Sovereignty of Evil* (New York: Routledge, 2013)

Ehrman, Bart D., *Forged* (New York: HarperOne, 2011)

Elgin, Catherine Z., 'The Epistemic Efficacy of Stupidity', *Synthese*, vol. 74, no. 3 (March 1988) 297-311

Eliot, George (Mary Ann Evans), *Middlemarch* (London: Penguin, 1965 – originally published 1871-72)

Eliot, T. S., *Collected Poems 1909-1962* (London: Faber & Faber, 1963)

Erasmus, Desiderius, *Praise of Folly*, Betty Radice trans. (London: Penguin, 1993 – originally published 1511)

Esler, Philip F., *The First Christians in their Social Worlds: Social-scientific approaches to New Testament interpretation* (London: Routledge, 1994)
– 'Introduction: Models, context and kerygma in New Testament Interpretation' in *Modelling Early Christianity*, Philip F. Esler ed. (London: Routledge, 1995) 1-20
– '1 Thessalonians' and '2 Thessalonians' in *The Oxford Bible Commentary*, John Barton and John Muddiman eds (Oxford: Oxford University Press, 2001) 1199-1219

Finkelstein, Israel and Silberman, Neil Asher, *David and Solomon* (New York: Free Press, 2006)

Flannery, Tim, *Atmosphere of Hope: Searching for solutions to the climate crisis* (Melbourne: Text Publishing, 2015)

Frede, Dorothea, 'The question of being: Heidegger's project' in *The Cambridge Companion to Heidegger*, Charles Guignon ed. (Cambridge: Cambridge University Press, 1993) 42-69

Frede, Michael, 'Plato's Arguments and the Dialogue Form' in *Methods of Interpreting Plato and his Dialogues*, Oxford Studies in Ancient Philosophy, Supplementary Vol. 1992, James C. Klagge and Nicholas D. Smith eds (Oxford: Clarendon Press, 1992) 201-219

Fricker, Miranda, *Epistemic Injustice* (Oxford: Oxford University Press, 2007)

Gadamer, Hans-Georg, *Truth and Method*, 2nd English ed., W. Glen-Doepel trans.; revised by Joel Weinsheimer & Donald G. Marshall (London: Sheed & Ward, 1989 – originally published 1960)

Gehl, Jan, *Cities for people* (Washington: Island Press, 2010)

Gibbons, B. J., *Spirituality and the Occult* (London: Routledge, 2001)

Giddens, Anthony, 'Jürgen Habermas' in *The Return of Grand Theory in the Human Sciences*, Quentin Skinner ed. (Cambridge: Cambridge University Press, 1985) 123-139

Giere, Ronald N., *Understanding Scientific Reasoning*, 4th ed. (Orlando, FL: Harcourt Brace, 1994 – 1st ed. 1979)

Gilbertson, Tamra and Reyes, Oscar, 'Carbon Trading – How it works and why it fails', *Critical Currents*, no. 7 (Uppsala: Dag Hammarskjöld Foundation, November 2009)

Gilligan, Carol, *In a Different Voice* (Cambridge, MA: Harvard University Press, 1982)
– and Richards, David A. J., *The Deepening Darkness: Patriarchy, Resistance and Democracy's Future* (New York: Cambridge University Press, 2009)

Glock, Hans-Johann, *A Wittgenstein Dictionary* (Oxford: Blackwell, 1996)

Godbey, Holly, 'Shifting Baseline Syndrome', Permaculture Research Institute (9 September 2016)

Gordon-Smith, Eleanor, *Stop Being Reasonable* (Sydney: NewSouth, 2019)

Gouk, Penelope, 'The harmonic roots of Newtonian science' in *Let Newton be!*, John Fauvel, Raymond Flood, Michael Shortland and Robyn Wilson eds. (Oxford: Oxford University Press, 1988) 101-125

Graham, Loren R., *What Have We Learned About Science and Technology from the Russian Experience?* (Stanford: Stanford University Press, 1998)

Grant, Michael, *Greeks and Romans: A Social History* (London: Weidenfeld and Nicolson, 1992)

Grondin, Jean, *Introduction to Philosophical Hermeneutics*, Joel Weinsheimer trans. (New Haven: Yale University Press, 1994 – originally published 1991)

Grove, Richard H., *Green Imperialism* (Cambridge: Cambridge University Press, 1995)
– *Ecology, Climate and Empire* (Cambridge: White Horse Press, 1997)

Habermas, Jürgen, *The Theory of Communicative Action*, vol. 1, Thomas McCarthy trans. (Boston: Beacon Press, 1984 – originally published 1981)
– *The Philosophical Discourse of Modernity*, Frederick G. Lawrence trans. (Cambridge, MS: MIT Press, 1987 – originally published 1985)
– *Moral Consciousness and Communicative Action*, Christian Lenhardt and Shierry Weber Nicholsen trans. (Cambridge, MA: MIT Press, 1990 – originally published 1983)
– *The Habermas Reader*, William Outhwaite ed. (Cambridge: Polity Press, 1996)
– *Between Naturalism and Religion*, Ciaran Cronin trans. (Cambridge: Polity Press, 2008 – originally published 2005)

Hallet, Garth L., *Essentialism: a Wittgensteinian Critique* (Albany: State University of New York Press, 1991)

Hampshire, Stuart, *Innocence and Experience* (London: Penguin Books, 1989)
– *Justice is Conflict* (Princeton: Princeton University Press, 2000)

Hardin, Garrett, 'The Tragedy of the Commons', *Science* (vol. 162, issue 3859, 13 December 1968), 1243-48

Hay, Peter, *Main Currents in Western Environmental Thought* (Sydney: University of New South Wales Press, 2002)

Heidegger, Martin, *Being and Time*, Joan Stambaugh trans., revised by Dennis J. Schmidt (Albany: State University of New York Press, 2010 – originally published 1927)

Heller, Agnes, *General Ethics* (Oxford: Basil Blackwell, 1988)

Hendrickson, Paul, *The Living and the Dead: Robert McNamara and five lives of a lost war* (Sydney: Vintage, 2000 – first published 1996)

Henry, John, 'Newton, matter, and magic' in *Let Newton be!*, John Fauvel, Raymond Flood, Michael Shortland and Robyn Wilson eds (Oxford: Oxford University Press, 1988) 127-145

Hill, Jess, *See What You Made Me Do* (Carlton, Victoria: Black Inc., 2019)

Hobbes, Thomas, *Leviathan*, C. B. Macpherson ed. (Harmondsworth: Penguin, 1968)

Hollander, John and Kermode, Frank eds, *The Literature of Renaissance England* (New York: Oxford University Press, 1973)

Horkheimer, Max and Adorno, Theodor W., *Dialectic of Enlightenment*, Edmund Jephcott trans. (Stanford: Stanford University Press, 2002 – originally published 1947)

Hornsey, Matthew, 'Social Identity Theory and Self-categorization Theory: A Historical Review', *Social and Personality Psychology Compass*, 2/1 (2008) 204-222

Hoskins, W. G., *The Making of the English Landscape*, Introduction and commentary by Christopher Taylor (Sevenoaks, Kent: Hodder and Stoughton, 1988 – first published 1955)

Hughes, J. Donald, *Ecology in Ancient Civilizations* (Albuquerque: University of New Mexico Press, 1975)
– 'Theophrastus as Ecologist', *Environmental Review*, vol. 9, no. 4, (winter, 1985) 296-306

Hughes, Robert, *American Visions* (London: Harvill Press, 1997)

Hulme, Mike, *Why We Disagree About Climate Change* (Cambridge: Cambridge University Press, 2009)

Hume, David, *A Treatise of Human Nature*, L. A. Selby-Bigge ed., 2nd ed. P. H. Nidditch (Oxford: Clarendon Press, 1978 – originally published 1739)
– *The History of England*, vol. I, part D, 'From Elizabeth to James I' (Project Gutenberg EBook – originally published 1754-1762)
– *Dialogues Concerning Natural Religion*, Richard H. Popkin ed. (Indianapolis: Hackett, 1980 – originally published 1779)

Jackson, R. B. et al., 'Global energy growth is outpacing decarbonization', *Environmental Research Letters*, vol. 13, no. 12 (December 2018)

Jacobs, Jane, *Dark Age Ahead* (New York: Vintage Books, 2005)

James, Clive, 'In praise of scepticism', *BBC Magazine* (23 October 2009)

Jameson, Fredric, *The Seeds of Time* (New York: Columbia University Press, 1994)

Jonas, Hans, *The Imperative of Responsibility*, Hans Jonas & David Herr trans. (Chicago: University of Chicago Press, 1984 – first published 1979)

Jones, Barry, *Sleepers, Wake!*, 4th ed. (Melbourne: Oxford University Press, 1995 – first ed. 1982)

Judge, E. A., *Social Distinctives of the Christians in the First Century* (Peabody, MA: Hendrickson, 2008)

Kahan, Dan M. et al., 'The polarizing impact of science literacy and numeracy on perceived climate change risks', *Nature Climate Change*, 2 (2012) 732-735

Kahneman, Daniel, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux, 2011)

Kakutani, Michiko, *The Death of Truth* (London: William Collins, 2018)

Kant, Immanuel, *Critique of Pure Reason*, Marcus Weigelt trans. (London: Penguin Classics, 2007 – originally published 1781)

Kateman, Brian, 'Evolutionary Psychology of Climate Change' in *State of the Planet* (Earth Institute, Columbia University, 9 January 2012)

Keen, Andrew, *The Internet is Not the Answer* (London: Atlantic Books, 2015)

Kirk, G. S. and Raven, J. E., *The Presocratic Philosophers* (Cambridge: Cambridge University Press, 1957)

Kitto, H. D. F., *Greek Tragedy*, 3rd ed. (London: Methuen, 1961 – first published 1939)

Klein, Naomi, 'Disaster Capitalism', *Harper's Magazine* (October 2007) 47-58

Kliegman, Julie, 'Jerry Brown says, "virtually no Republican in Washington accepts climate change science"', *Politifact* (18 May 2014)

Kliff, Sarah, 'Why Obamacare enrolees voted for Trump', *Vox* (13 December 2016)

Klotzbach, Philip J. and Landsea, Christopher W., 'Extremely Intense Hurricanes: Revisiting Webster et al. after 10 Years', *Journal of Climate* (1 October 2015) 7621-7629

Kolbert, Elizabeth, *Field Notes from a Catastrophe: Man, Nature, and Climate Change*, 2nd ed. (New York: Bloomsbury, 2015 – 1st ed. 2006)
– 'The Siege of Miami', *New Yorker* (21-28 December 2015)

Kors, Alan Charles & Peters, Edward eds, *Witchcraft in Europe, 400-1700*, 2nd ed., revised by Edward Peters (Philadelphia: University of Pennsylvania Press, 2001)

Kramer, Ronald C., and Michalowski, Raymond J., 'Is Global Warming a State-Corporate Crime?' in *Climate Change from a Criminological Perspective*, Rob White, ed. (New York: Springer, 2012) 71-88

Langton, Rae, 'Speech Acts and Unspeakable Acts', *Philosophy & Public Affairs* Vol. 22, No. 4 (Autumn 1993) 293-330

Larner, Christina, *Enemies of God: The Witch-hunt in Scotland* (Oxford: Basil Blackwell, 1983)

Lawrence, Peter, *Justice for Future Generations* (Cheltenham: Edward Elgar Publishing, 2015)

Le Doeuff, Michèle, *Hipparchia's Choice*, Trista Selous trans. (Oxford: Blackwell, 1991 – originally published 1989)
– *The Sex of Knowing*, Kathryn Hamer & Lorraine Code trans (New York: Routledge, 2003 – originally published 1998)

LeDoux, Joseph, *The Emotional Brain* (London: Phoenix, 1999)

Lenton, Timothy M. et al., 'Climate tipping points – too risky to bet against', *Nature* (27 November 2019)

Levack, Brian P., *The Witch-Hunt in Early Modern Europe*, 2nd ed. (London: Longman, 1995 – first published 1987)

Lévi-Strauss, Claude, *Structural Anthropology*, Claire Jacobson and Brooke Grundfest Schoepf trans (New York: Basic Books, 1963 – first published 1958)
– *The Raw and the Cooked*, John and Doreen Weightman trans (London: Penguin, 1992 – first published 1964)
– *Myth and Meaning* (New York: Schocken Books, 1995 – first published 1978. Edited transcript of interviews conducted in English.)

Lewis, John David, *Solon the Thinker* (London: Duckworth, 2006)

Lewis, Oscar, 'The Culture of Poverty', *Scientific American*, vol. 215, no. 4 (October 1966) 19-25

Leys, Simon, *The Hall of Uselessness* (Collingwood, Vic.: Black Inc., 2011)

Lindsey, Hal, *The Late Great Planet Earth* (Grand Rapids, MI: Zondervan, 1970)

Lipstadt, Deborah E., *Denying the Holocaust* (London: Penguin, 1995)

Liverani, Mario, *Israel's History and the History of Israel*, Chiara Peri and Philip R. Davies trans. (London: Equinox, 2005 – originally published 2003)

Lloyd, G. E. R., *Adversaries and Authorities* (Cambridge: Cambridge University Press, 1996)

Lloyd, Genevieve, *The Man of Reason* (London: Methuen, 1984)

Lomborg, Bjørn, *The Skeptical Environmentalist* (Cambridge: Cambridge University Press, 2001 – first published 1998)

Lorenz, Konrad, *On Aggression*, Marjorie Latzke trans. (London: Methuen, 1966 – originally published 1963)

Lukes, Steven, 'Methodological Individualism Reconsidered' in *The Philosophy of Social Explanation*, Alan Ryan ed. (Oxford: Oxford University Press, 1973) 119-129. [Originally published in *The British Journal of Sociology*, vol. 19, no. 2 (June, 1968).]

MacIntyre, Alasdair, *After Virtue*, 2nd ed. (London: Duckworth, 1985 – first published 1981)

MacMullen, Ramsay, *Paganism in the Roman Empire* (New Haven: Yale University Press, 1981)

Malcolm, Norman, *Ludwig Wittgenstein: A Memoir* (London: Oxford University Press, 1958)

Malherbe, Abraham J., *Social Aspects of Early Christianity*, 2nd ed. enlarged (Philadelphia: Fortress Press, 1983 – 1st ed. 1977)

Malina, Bruce J., *Christian Origins and Cultural Anthropology* (Atlanta: John Knox Press, 1986)

Manabe, Syukuro and Wetherald, Richard T., 'Thermal Equilibrium of the Atmosphere with a Given Distribution of Relative Humidity', *Journal of the Atmospheric Sciences*, vol. 24, no. 3 (May 1967)

Marshall, George, *Don't Even Think About It* (New York: Bloomsbury, 2014)

Marx, Karl, *Grundrisse*, Martin Nicolaus trans. (Harmondsworth: Penguin, 1973 – written 1858)

McGinn, Marie, *Wittgenstein and the Philosophical Investigations* (London: Routledge, 1997)

McGowan, John, *Postmodernism and Its Critics* (Ithaca: Cornell University Press, 1991)

McMichael, Anthony J. with Alistair Woodward and Cameron Muir, *Climate Change and the Health of Nations* (New York: Oxford University Press, 2017)

McNeill, J. R., *Something New Under the Sun* (London: Penguin/Allen Lane, 2000)

Merleau-Ponty, Maurice, *Phenomenology of Perception*, Colin Smith trans. (Abingdon: Routledge, 2002 – originally published 1945)

Mill, John Stuart, 'On Liberty' in *On Liberty and Other Essays* (Oxford: Oxford University Press, 1991 – originally published 1859)

Molena, Francis, 'Remarkable Weather of 1911: The Effect of the Combustion of Coal on the Climate – What Scientists Predict for the Future', *Popular Mechanics* (March 1912) 339-342

Montaigne, Michel de, *The Complete Works*, Donald M. Frame trans. (New York: Everyman's Library, 2003)

Müller, Ingo, *Hitler's Justice*, Deborah Lucas Schneider trans. (Cambridge, MA: Harvard University Press, 1991 – originally published 1987)

Murray, Brian, and Rivers, Nicholas, 'British Columbia's revenue-neutral carbon tax: A review of the latest "grand experiment" in environmental policy', *Energy Policy*, vol. 86 (November 2015) 674-683

Murray, Oswyn, 'Greek Historians' in *The Oxford History of the Classical World*, John Boardman, Jasper Griffin and Oswyn Murray eds (London: Oxford University Press and Book Club Associates, 1986) 186-203

Nails, Debra, *Agora, Academy, and the Conduct of Philosophy* (Dordrecht: Kluwer Academic, 1995)
– *The People of Plato: a Prosopography of Plato and other Socratics* (Indianapolis: Hackett, 2002)
– 'The Trial and Death of Socrates' in *A Companion to Greek and Roman Political Thought*, Ryan K. Balot ed. (Chichester: Wiley-Blackwell, 2009) 323-338
– 'Plato's *Republic* in its Athenian Context', *History of Political Thought*, Vol. 33, No. 1 (Spring 2012) 1-23

Nichols, Tom, *The Death of Expertise* (New York: Oxford University Press, 2017)

Nicholson, Peter P., 'Kant, Revolutions and History' in *Essays on Kant's Political Philosophy*, Howard Lloyd Williams ed. (Chicago: University of Chicago Press, 1992) 249-268

Nietzsche, Friedrich, *Beyond Good and Evil*, Walter Kaufmann trans. (New York: Vintage Books, 1966 – originally published 1886)
– *The Will to Power*, Walter Kaufmann and R. J. Hollingdale trans., Walter Kaufmann ed. (New York: Vintage Books, 1967)

Nightingale, Andrea Wilson, *Genres in dialogue: Plato and the construct of philosophy* (Cambridge: Cambridge University Press, 1995)

Noble, Safiya Umoja, *Algorithms of Oppression* (New York: New York University Press, 2018)

Nystrom, Scott and Luckow, Patrick, *The Economic, Climate, Fiscal, Power, and Demographic Impact of a National Fee-and-Dividend Carbon Tax* (Washington DC: REMI and Synapse, 2014)

Ober, Josiah, *The Rise and Fall of Classical Greece* (Princeton: Princeton University Press, 2015)

Oreskes, Naomi and Conway, Erik M., *Merchants of Doubt* (London: Bloomsbury Publishing, 2010)

Orwell, George, 'Politics and the English Language' in *The Penguin Essays of George Orwell* (London: Penguin, 1984 – originally published 1946) 354-366

Otto, Shawn, *The War on Science* (Minneapolis: Milkweed, 2016)

Palmer, Richard E., *Hermeneutics* (Evanston: Northwestern University Press, 1969)

Palmer, Roxanne, 'GMO Health Risks: What the Scientific Evidence Says', *International Business Times* (30 March 2013)

Panksepp, Jaak and Biven, Lucy, *The Archaeology of Mind* (New York: W. W. Norton, 2012)

Parfit, Derek, *Reasons and Persons* (Oxford: Oxford University Press, 1986)
– *On What Matters*, 2 vols (Oxford: Oxford University Press, 2011)

Parker, Jenneth, 'Towards a dialectics of knowledge and care in the global system' in *Interdisciplinarity and Climate Change*, Roy Bhaskar et al. eds (Abingdon: Routledge, 2010) 205-226

Peterson, Martin, *An Introduction to Decision Theory*, 2nd ed. (Cambridge: Cambridge University Press, 2017 – 1st ed. 2009)

Phillips, Allie, *Understanding The Link between Violence to Animals and People* (Alexandria, Virginia: National District Attorneys Association, 2014)

Plimer, Ian, *Heaven and Earth* (Lanham, MD: Taylor Trade Publishing, 2009)
– 'The great climate change con trick', *The Spectator* (11 July 2009)

Plumwood, Val, *Feminism and the Mastery of Nature* (London: Routledge, 1993)

Ponting, Clive, *A Green History of the World* (London: Penguin, 1992)

Poole, Ross, *Morality and Modernity* (London: Routledge, 1991)

Poortinga, Wouter; Spence, Alexa; Whitmarsh, Lorraine; Capstick, Stuart; Pidgeon, Nick F., 'Uncertain climate: An investigation into public scepticism about anthropogenic climate change', *Global Environmental Change*, vol. 21, issue 3 (August 2011) 1015-1024

Popper, K. R., *The Open Society and Its Enemies*, 2 vols, 4th ed. (London: Routledge & Kegan Paul, 1962 – first published 1945)

Ramsey, Frank Plumpton, 'A Mathematical Theory of Saving', *The Economic Journal*, Vol. 38, No. 152 (Dec. 1928) 543-559

Rawls, John, *A Theory of Justice* (Oxford: Oxford University Press, 1972)
– *Political Liberalism* (New York: Columbia University Press, 2005)

Redwood, John, *Reason, Ridicule and Religion* (London: Thames and Hudson, 1976)

Resnik, Michael D., *Choices: an introduction to decision theory* (Minneapolis: University of Minnesota Press: 1987)

Rich, Nathaniel, 'Losing Earth: The Decade We Almost Stopped Climate Change', *New York Times Magazine* (1 August 2018)

Richter, Burton, *Beyond Smoke and Mirrors*, 2nd ed. (Cambridge: Cambridge University Press, 2014 – 1st ed. 2010)

Ripple, William J.; Wolf, Christopher; Newsome, Thomas M.; Barnard, Phoebe; Moomaw, William R., 'World Scientists' Warning of a Climate Emergency', *BioScience*, biz088 (Nov. 2019)

Robinson, E. and Robbins, R. C., *Sources, abundance, and fate of gaseous atmospheric pollutants*, Stanford Research Institute (February 1968)

Ronell, Avital, *Stupidity* (Urbana IL: University of Illinois Press, 2002)

Rowe, M. W., 'Wittgenstein, Plato, and the Historical Socrates', *Philosophy* 82 (319) (2007) 45-85

Russell, Jeffrey Burton, *A History of Witchcraft* (London: Thames and Hudson, 1980)
– *Mephistopheles* (Ithaca, NY: Cornel University Press, 1986)

Ryan, Alan, 'Introduction' in *The Philosophy of Social Explanation*, Alan Ryan ed. (Oxford: Oxford University Press, 1973) 1-14

Ste Croix, G. E. M. de, *The Class Struggle in the Ancient Greek World* (London: Duckworth, 1981)

Salisbury, Brian and Asquith, Phil, 'The Lucas Plan, Then And Now', *Morning Star* (22 November 2016)

Sallis, John, *Chorology: On Beginning in Plato's* Timaeus (Bloomington, IN: Indiana University Press, 1999)

Sanders, E. P., *Judaism: Practice and Belief 63BCE – 66CE* (London: SCM Press, 1992)
– *Paul: The Apostle's Life, Letters, and Thought* (Minneapolis: Fortress Press, 2015)

Saul, John Ralston, *Voltaire's Bastards* (Toronto: Penguin Books, 1993)

Saunders, George, *The Brain Dead Megaphone* (London: Bloomsbury, 2008)

Schleiermacher, F. D. E., *Hermeneutics: the Handwritten Manuscripts*, James Duke and Jack Forstman trans. (Missoula, MT: Scholars Press, 1977 – written 1805-1833)

Schönfeld, Martin, 'Field, Being, Climate: Climate Philosophy and Cognitive Evolution' in *Climate Change and Philosophy*, Ruth Irwin ed. (London: Continuum, 2010) 21-31

Schopenhauer, Arthur, *The World as Will and Presentation*, vol. 2, Richard E. Aquila and David Carus trans (New York: Pearson Longman, 2008 – originally published 1844; 2nd ed. 1859)

Schumpeter, Joseph A., *Capitalism, Socialism and Democracy*, 2nd ed. (Mansfield Centre, CT: Martino Publishing, 2011 – first ed. 1942; 2nd ed. 1947)

Scorer, R. S., *The Clever Moron* (London: Routledge & Kegan Paul, 1977)

Sherwood, Steven C.; Bony, Sandrine; Dufresne, Jean-Louis, 'Spread in model climate sensitivity traced to atmospheric convective mixing', *Nature*, Vol. 505 (2014) 37-42

Siegel, Daniel J., *The Developing Mind*, 2nd ed. (New York: Guildford Press, 2012)

Simis, Molly J.; Madden, Haley; Cacciatore, Michael A. and Yeo, Sara K., 'The lure of rationality: Why does the deficit model persist in science communication?', *Public Understanding of Science*, vol. 25(4) (2016) 400-414

Sinai, I. Robert, *The Decadence of the Modern World* (Cambridge, MA: Schenkman Publishing, 1978)

Singer, Peter, *The President of Good and Evil* (Melbourne: Text Publishing, 2004)

Sklar, Julia, '"Zoom fatigue" is taxing the brain. Here's why that happens.', *National Geographic* (24 April 2020).

Smith, John Maynard, *Did Darwin Get It Right* (London: Penguin, 1993 – first published 1989)

Snitow, Ann, 'Talking Back to the Patriarchy', *Dissent* (Spring, 2018) 88-93

Snyder, Timothy, *The Road to Unfreedom* (New York: Tim Duggan Books, 2018)

Sokal, Alan and Bricmont, Jean, *Intellectual Impostures* (London: Profile Books, 1998)

Song, Lisa; Banerjee, Neela and Hasemyer, David, 'Exxon Confirmed Global Warming Consensus in 1982 with In-House Climate Models', *Inside Climate News* (22 September 2015)

Sorenson, Raymond P., 'Eunice Foote's Pioneering Research On CO_2 And Climate Warming', *Search and Discovery* Article #70092 (2011)

Specter, Michael, *Denialism* (London: Duckworth Overlook, 2010)

Spracklen, D. V., Arnold, S. R. and Taylor, C. M., 'Observations of increased tropical rainfall preceded by air passage over forests', *Nature*, vol. 489 (13 September 2012) 282-285

Stebbing, L. Susan, *Ideals and Illusions* (London: Watts, 1941)

Strahan, Ronald, 'The Creationism crusade' in *Confronting Creationism: Defending Darwin*, D. R. Selkirk and F. J. Burrows eds (Kensington, Sydney: University of New South Wales Press, 1987) 1-13

Stroebe, Wolfgang, and Jonas, Klaus, 'Attitudes II: Strategies of Attitude Change' in *Introduction to Social Psychology*, Miles Hewstone, Wolfgang Stroebe, Jean-Paul Codol and Geoffrey M. Stephenson eds (Oxford: Basil Blackwell, 1988) 165-195

Suldovsky, Brianne, 'In science communication, why does the idea of the public deficit always return? Exploring key influences', *Public Understanding of Science*, vol. 25(4) (2016) 415-426

Sutherland, Stuart, *Irrationality* (London: Penguin Books, 1994)

Swingle, Mari K., *i-Minds* (Gabriola Island, BC, Canada: new society publishers, 2016)

Tainter, Joseph A., *The Collapse of Complex Societies* (Cambridge: Cambridge University Press, 1988)

Taylor, A. E., *Plato: the Man and His Work*, 4th ed. (London: Methuen, 1960 – first published 1926)

Taylor, A. J. P., *The First World War* (London: Hamish Hamilton, 1963)

Taylor, Telford, *The Anatomy of the Nuremberg Trials* (London: Bloomsbury, 1993)

Thompson, Kenneth, 'Forests and Climate Change in America: Some Early Views', Climatic Change, 3 (1980) 47-64

Trump, Mary L., *Too Much and Never Enough* (London: Simon & Schuster, 2020)

Tuchman, Barbara, *The March of Folly: From Troy to Vietnam* (London: Abacus, Sphere Books, 1985)

Tully, James, *Public Philosophy in a New Key*, 2 vols (Cambridge: Cambridge University Press, 2008)

Valle, Ronald S.; King, Mark, & Halling, Steen, 'An Introduction to Existential-Phenomenological Thought in Psychology' in *Existential-Phenomenological Perspectives in Psychology*, Ronald S. Valle & Steen Halling eds (New York: Plenum Press, 1989) 3-16

Van Avermaet, Eddy, 'Social Influences in Small Groups' in *Introduction to Social Psychology*, Miles Hewstone, Wolfgang Stroebe, Jean-Paul Codol and Geoffrey M. Stephenson eds (Oxford: Basil Blackwell, 1988) 350-380

Vlastos, Gregory, *Socrates: ironist and moral philosopher* (Cambridge: Cambridge University Press, 1991)

de Waal, Frans B. M. and Davis, Jason M., 'Capuchin cognitive ecology: cooperation based on projected returns', *Neuropsychologia* 41(2) (1 January 2003) 221-228

Wallace-Wells, David, 'The Uninhabitable Earth', *New York Magazine* (9 July 2017)

Ward, George, 'Happiness and Voting Behaviour' in *World Happiness Report 2019*, John F. Helliwell, Richard Layard and Jeffrey D. Sachs eds (New York: Sustainable Development Solutions Network, 2019) chapter 3

Weinkle, Jessica et al., 'Normalized hurricane damage in the continental United States 1900-2017', *Nature Sustainability*, vol. 1 (December 2018) 808-813

Weinsheimer, Joel, *Philosophical Hermeneutics and Literary Theory* (New Haven: Yale University Press, 1991)

Wilke, Henk, and Van Knippenberg, Ad, 'Group Performance' in *Introduction to Social Psychology*, Miles Hewstone, Wolfgang Stroebe, Jean-Paul Codol and Geoffrey M. Stephenson eds (Oxford: Basil Blackwell, 1988) 315-349

Wilson, Harry L., *Gun Politics in America* (Santa Barbara: ABC-CLIO, 2016)

Wittgenstein, Ludwig, 'A Lecture on Ethics' (1929) in *Philosophical Occasions 1912-1951*, James C. Klagge and Alfred Nordmann eds. (Indianapolis: Hacket Publishing, 1993)
– *The Blue and Brown Books* (Oxford: Basil Blackwell, 1960). This book was written in English.
– *Philosophical Investigations*, 4th ed., G. E. M. Anscombe trans.; P. M. S. Hacker and Joachim Schulte trans. and eds (Oxford: Wiley-Blackwell, 2009)

Woodin, S. J., 'Environmental Effects of Air Pollution in Britain', *Journal of Applied Ecology*, vol. 26, no. 3 (1989) 749-761

Wootton, David, *Bad Medicine* (Oxford: Oxford University Press, 2007)

Wright, M. R., *Introducing Greek Philosophy* (Berkeley: University of California Press, 2010)

Yudkin, John, *Pure, White and Deadly* (London: Penguin Books, 2012 – first published 1972; revised ed. 1986)

Zarocostas, John, 'How to fight an infodemic', *The Lancet*, vol. 395 (29 February 2020)

Žižek, Slavoj, *Living in the End Times* (London: Verso, 2011)

*****

ANCIENT TEXTS

Aeschylus, *The Persians*, Seth G. Benardete trans. (Chicago: University of Chicago Press, 1956)

Aristotle, *The Complete Works of Aristotle: The Revised Oxford Translation*, 2 vols., Jonathan Barnes ed. (Princeton, NJ: Princeton University Press, 1984)
– *De Anima*, C. D. C. Reeve trans. (Indianapolis: Hackett, 2017)
– *The Art of Rhetoric*, Robin Waterfield trans., Introduction and notes by Harvey Yunis (Oxford: Oxford University Press, Oxford World's Classics, 2018)
– *Nicomachean Ethics*, 2nd ed., Terence Irwin trans. (Indianapolis: Hackett Publishing, 1999)

Confucius, *The Analects of Confucius*, Simon Leys trans. (New York: W. W. Norton, 1997)

Homer, *The Odyssey*, E. V. Rieu trans.; rev. by D. C. H. Rieu (London: Penguin, 1991)

Pausanias, *Guide to Greece*, vol. 1, Peter Levi trans. (London: Penguin, 1971)

Plato, *Complete Works*, John M. Cooper ed. (Indianapolis: Hackett Publishing, 1997)
– *The Last Day of Socrates*, Christopher Rowe trans. (London: Penguin, 2010)
– *Meno and Phaedo*, David Sedley and Alex Long trans. (Cambridge: Cambridge University Press, 2010)
– *Republic*, Robin Waterfield trans. (Oxford: Oxford University Press, World's Classics, 1994)
– *Republic*, C. D. C. Reeve trans. (Indianapolis: Hackett Publishing, 2004)
– *The Republic of Plato*, Francis Macdonald Cornford trans. (Oxford: Clarendon Press: 1941)

Theophrastus, *De causis plantarum*, Benedict Einarson and George K. K. Link trans. (Cambridge, MA: Harvard University Press, 1990)
– *De ventis*, Victor Coutant and Val L. Eichenlaub trans. (Notre Dame, IN: University of Notre Dame Press, 1975)

Thucydides, *The Peloponnesian War*, Martin Hammond trans. (Oxford: Oxford University Press, 2009)
– *The War of the Peloponnesians and the Athenians*, Jeremy Mynott trans. (Cambridge: Cambridge University Press, 2013)

Xenophon, *Conversations of Socrates*, Hugh Tredennick and Robin Waterfield trans. (London: Penguin, 1990)
– *Anabasis*, Carleton L. Brownson trans., John Dillery rev. (Cambridge MA: Harvard University Press, 1998)

FILM

The Unchained Goddess, The Bell System Science Series, screenplay by Frank Capra and Jonathan Latimer (1958).

REFERENCE TEXTS

The New York Public Library Science Desk Reference, Patricia Barnes-Svarney ed. (New York: Macmillan, 1995)

The Oxford Classical Dictionary, 3rd ed., Simon Hornblower and Antony Spawforth eds (Oxford: Oxford University Press, 1996)

SEMINAR

Ryan, Sean (EDO Queensland) 'Recent development in Australian climate change mitigation litigation – case studies in incrementalism' (University of Tasmania, 27 April 2017)

REPORTS

American Lung Association, *The State of the Air 2019*

Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC, Geneva: 2014)

Curtice, J., Clery, E., Perry, J., Phillips, M. and Rahim, N. eds, *British Social Attitudes: The 36th Report* (London: The National Centre for Social Research, 2019)

Department of the Prime Minister and Cabinet, *Australia's Second Open Government National Action Plan 2018-20* (2018)

Global Covenant of Mayors for Climate and Energy, 'Cities at the Forefront of Tackling Climate Change', *The New York Times* (22 December 2018)

Gromada, Anna, et al., *Worlds of Influence: Understanding what shapes child well-being in rich countries*, Innocenti Report Card 16 (Florence: UNICEF, 2020)

National Academy of Sciences, *Changing Climate: Report of the Carbon Dioxide Assessment Committee* (Washington DC: National Academy Press, 1983)

National Oceanic and Atmospheric Administration, Technical Report NOS CO-OPS 092, *2019 State of U.S. High Tide Flooding with a 2020 Outlook* (July 2020)

National Research Council, *Carbon Dioxide and Climate: A Scientific Assessment* (Washington DC: The National Academies Press, 1979)

Newport, Frank, 'In U.S., 42% Believe Creationist View of Human Origins', *Gallop News* (2 June 2014)

New Zealand Government: Ministry for the Environment, *Environment Aotearoa 2019*

Pew Research Center, 'Jesus Christ's Return to Earth' (14 July 2010)
– '5 facts about the religious lives of African Americans' (7 February 2018)
– 'A look at how people around the world view climate change' (18 April 2019)
– 'In U.S., Decline of Christianity Continues at Rapid Pace' (17 October 2019)
– 'White Christians continue to favor Trump over Biden, but support has slipped' (13 October 2020)

Psychology & Global Climate Change: addressing a multifaceted phenomenon and set of challenges: A Report of the American Psychological Association Task Force on the Interface Between Psychology and Global Climate Change (Janet Swim, Chair: 2009)

Railway Finances, report of a committee chaired by Sir David Serpell (London: Department of Transport, 1983)

'Smoking and Health Proposal (1969)', Brown & Williamson Records, Truth Tobacco Industry Documents

United States Environmental Protection Agency, Global Greenhouse Gas Emissions Data

US Geological Survey, Volcano Hazards Program

Waldersee, Victoria, 'Which science-based conspiracy theories do Britons believe?', YouGov.co.uk (25 April 2019)

World Happiness Report 2019, John F. Helliwell, Richard Layard and Jeffrey D. Sachs eds (New York: Sustainable Development Solutions Network, 2019)

NEWSPAPERS

Caffrey, Maria, 'I'm a scientist. Under Trump I lost my job for refusing to hide climate crisis facts', *The Guardian* (25 July 2019)

Chan, Gabrielle, '"He's a maverick": why New England kept the faith with Barnaby Joyce', *The Guardian*, Australian ed. (15 June 2019)

Clark, Andrew, 'Joyce doubles down on climate change as an elitist issue', *AFR Weekly* (30-31 March 2019)

Crowe, David, 'Deputy PM slams people raising climate change in relation to NSW bushfires', *The Guardian*, Australian ed. (11 November 2019)
– and Max Koslowski, '"Take it down a few notches": Morrison urges calm as fire blame game escalates', *The Guardian*, Australian ed. (12 November 2019)

Denniss, Richard, 'Climate change makes bushfires worse. Denying the truth doesn't change the facts.', *The Guardian*, Australian ed. (13 November 2019)

Farrelly, Elizabeth, 'Election heartbreak: voters begged to be duped', *Sydney Morning Herald* (25 May 2019)

Franta, Benjamin, 'On its hundredth birthday in 1959, Edward Teller warned the oil industry about global warming', *The Guardian* (1 January 2018)

Gabbatiss, Josh, 'Ozone hole-forming chemical emissions increasing and mysterious source in East Asia may be responsible', *The Independent* (16 May 2018)

Gilbert, Daniel, 'If Only Gay Sex Caused Global Warming', *Los Angeles Times* (2 July 2006)

Gjelten, Tom, '2020 Faith Vote Reflects 2016 Patterns', National Public Radio (8 November 2020)

Godwin, Richard, 'One giant ... lie? Why so many people still think the moon landings were faked', *The Guardian* (12 July 2019)

Han, Esther, 'NSW Government's F6 property bungle caused by haste to privatise Land and Property Information Unit, say former staff', *Sydney Morning Herald* (3 November 2016)
– 'NSW Government refuses to debate the land titles registry sale and the F6 property bungle' *Sydney Morning Herald* (14 November 2016)

Johnston, Ian, 'Climate-change sceptic says they should have right to "mislead public" because of free speech', *The Independent* (30 March 2017)

Kelly, Anthony, 'Brutality checks on activists', *The Saturday Paper* (9-15 November 2019)

Kristof, Nicholas, 'An Idiot's Guide to Inequality', *New York Times* (23 July 2014)

Lomborg, Bjorn, 'Report's sensationalist claim of "climate breakdown" is catchy but untrue', *Weekend Australian* (19-20 January 2019)

Middleton, Karen, 'Carryover regardless', *The Saturday Paper* (21 December 2019 - 24 January 2020)

Monbiot, George, 'This professor of denial can't even answer his own questions on climate change', *The Guardian* (14 September 2009)
– 'From Trump to Johnson, nationalists are on the rise – backed by billionaire oligarchs', *The Guardian* (26 July 2019)
– 'The big polluters' masterstroke was to blame the climate crisis on you and me', *The Guardian* (10 October 2019)

Murphy, Katharine, 'Scott Morrison and the Coalition are fiddling as Australia burns', *The Guardian*, Australian ed. (10 December 2019)

Needham, Kirsty, 'Why searching for the truth about Tiananmen is more important than ever', *Sydney Morning Herald* (31 May 2019)

Phillips, Tom et al., 'Tsunami of fake news hurts Latin America's effort to fight coronavirus', *The Guardian* (26 July 2020)

Seccombe, Mike, 'How the religious right stall climate action', *The Saturday Paper* (26 August-1 September 2017)

Sherwood, Harriet, 'Evangelical Christians "uncritical" in support for Trump, UK bishop says', *The Guardian* (28 December 2017)

Smith, Alexandra and Crowe, David, 'Deputy Premier says climate change talk amid fire crisis a "disgrace"', *The Guardian*, Australian ed. (11 November 2019)

Smith, David, 'After a repentant Trump voter's one-man protest, what happened next?', *The Guardian* (22 August 2020)
– 'The lies have it. Republicans abandon truth in Trump impeachment defence', *The Guardian* (15 December 2019)

Sullivan, Patricia, 'Anne Gorsuch Burford, 62, Dies; Reagan EPA Director', *Washington Post* (22 July 2004)

Wahlquist, Calla, 'Australia's summer bushfire smoke killed 445 and put thousands in hospital, inquiry hears', *The Guardian*, Australian ed. (26 May 2020)

Editorial staff and other groups

'Big Three CEOs Flew Private Jets to Plead for Public Funds', *ABC News* (19 November 2008)

'Experts say NSW land titles registry sell-off a disaster', *Government News* (24 February 2017)

Global Covenant of Mayors for Climate and Energy, 'Cities at the Forefront of Tackling Climate Change', *New York Times* (22 December 2018)

'Invisible Blanket', *Time Magazine* (25 May 1953)

'Lots of Lessons From Afghanistan; None Learned', *New York Times* (10 December 2019)

'The Talk of the Town', *New Yorker* (18 April 1970) 33-34

Television

'The Sceptics', SBS *Insight* (31 May 2010).